**IN THE UNITED STATES DISTRICT COURT FOR
THE EASTERN DISTRICT OF VIRGINIA
NORFOLK DIVISION**

Latasha Holloway, *et al*.,	
Plaintiffs,	
	Civil Action No. 2:18-cv-0069
v.	
City of Virginia Beach, *et al*.,	
Defendants	

**MEMORANDUM IN OPPOSITION TO DEFENDANTS' MOTION TO EXCLUDE
PLAINTIFFS' SUPPLEMENTAL EXPERT REPORTS AND OPINIONS**

PLAINTIFFS' EXHIBIT 8
Deposition Transcript of Defendants' Expert Dr. Peter Morrison

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Transcript of Peter A. Morrison, Ph.D.

Date: September 24, 2019
Case: Holloway, et al. -v- City of Virginia Beach, et al.

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1            IN THE UNITED STATES DISTRICT COURT

2           FOR THE EASTERN DISTRICT OF VIRGINIA

3                    NORFOLK DIVISION

4    --------------------------------x

5    LATASHA HOLLOWAY and              :

6    GEORGIA ALLEN,                    :

7                 Plaintiffs,   :      CASE NO.

8    v.                               :      2:18cv00069

9    CITY OF VIRGINIA BEACH, et al.,:

10                Defendants.    :

11   --------------------------------x

12

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14        Deposition of PETER A. MORRISON, Ph.D.

15            Virginia Beach, Virginia

16          Tuesday, September 24, 2019

17                 9:35 a.m.

18

19

20   Job No. 261909

21   Pages 1 - 166

22   Reported by:  Penny C. Wile, RPR, RMR, CRR
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1   Deposition of PETER A. MORRISON, Ph.D.,

2   held at the offices of:

3

4

5   VIRGINIA BEACH CITY ATTORNEY

6   2401 Courthouse Drive

7   Municipal Center, Building One

8   Room 260

9   Virginia Beach, VA 23456

10   (757)385-4351

11

12

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16

17   Pursuant to Notice, before Penny C. Wile,

18   RPR, RMR, CRR, Notary Public of the Commonwealth

19   of Virginia.

20

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 1              A P P E A R A N C E S

 2   ON BEHALF OF THE PLAINTIFFS, LATASHA HOLLOWAY

 3   AND GEORGIA ALLEN:

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 1           A P P E A R A N C E S

 2   ON BEHALF OF THE DEFENDANTS, CITY OF VIRGINIA

 3   BEACH, ET AL.:

 4        GERALD L. HARRIS, ESQUIRE

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Transcript of Peter A. Morrison, Ph.D.
Conducted on September 24, 2019   5

1   C O N T E N T S

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Transcript of Peter A. Morrison, Ph.D.
Conducted on September 24, 2019   6

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1                    P R O C E E D I N G S

2    Whereupon,

3              PETER A. MORRISON, Ph.D.,

4    after having been first duly sworn, was examined

5    and did testify under oath as follows:

6     EXAMINATION BY COUNSEL FOR THE PLAINTIFFS:

7    BY MR. HEBERT:

8        Q. Will you state your full name for the

9    record, please?

10       A. Peter Alan Morrison.  It's A-L-A-N.

11       Q. And where do you reside?

12       A. I reside in Nantucket, Massachusetts.  You

13   want my full address?

14       Q. Yes.

15       A. Number 3 -- and, then, there is four

16   words -- Eat, E-A-T, Fire, F-I-R-E, Springs Road,

17   Nantucket, Massachusetts 02554.

18       Q. And you've provided your CV to us,

19   correct, as an attachment to your report?

20       A. Yes.

21       Q. Okay.  Is that updated as of today?

22       A. Not as of today, but it's very recently
```

Transcript of Peter A. Morrison, Ph.D.
Conducted on September 24, 2019   7

1   updated, as of probably the last month. If you

2   look at the last page, it will indicate the

3   vintage --

4   Q. Okay.

5   A. -- at the bottom.

6   Q. Through 7-27-2019, it says updated. Does

7   that sound right?

8   A. Yes, it does.

9   Q. And before we go further, I'll try not to

10 talk until you have finished your answer, and if

11 you could wait until I finish my question to start

12 your answer, the court reporter will smile at both

13 of us.

14   A. Thank you.

15   Q. Are there any updates since July 27th,

16 either articles or cases that you have -- need to

17 add to this to update it, the CV?

18   A. Nothing that I can think of. No articles,

19 and no further testimony.

20   Q. Okay. What about agreements to serve as

21 an expert witness for the jurisdiction? Are there

22 any since July 27th that are not reflected here?

Transcript of Peter A. Morrison, Ph.D.
Conducted on September 24, 2019   8

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1        A. I don't think there is anything since that

2   date where I've agreed to work on a case, but I'd

3   have to check my records.  I'm working on several

4   cases, and I believe that they all began before

5   that date.

6        Q. All right.  There is a current case

7   pending in the State of Mississippi involving

8   redistricting.  Are you involved in that

9   litigation?

10       A. I was involved --

11          MR. HARRIS:  Objection to form.

12          You can answer.

13       A. I am not involved in anything currently

14  having to do with Mississippi redistricting.  I

15  was involved in a case that went to trial.  And it

16  may have been the predecessor to that.

17       Q. The case that I am aware of is a statewide

18  redistricting case, not a local government

19  redistricting case.

20          I know you testified, for example, in

21  Quitman -- was it Quitman County --

22       A. Correct.
```

Transcript of Peter A. Morrison, Ph.D.
Conducted on September 24, 2019   9

1   Q. -- Mississippi?

2   But there is a statewide case. I believe

3   it's still pending. Have you been involved in

4   that as an expert?

5   A. Not to my knowledge. The case I have been

6   involved in in Mississippi most recently had to do

7   with one congressional district, I believe, but

8   not the entire plan.

9   Q. And you testified for the State of

10   Mississippi in that case?

11   A. Yes.

12   Q. And has the court rendered a decision in

13   that case?

14   A. I believe they have, yes.

15   Q. In favor of the plaintiffs, correct?

16   A. I believe so, yes.

17   Q. All right. According to your report, you

18   were asked, you say, to evaluate the plaintiffs'

19   Amended Complaint and the expert witness report of

20   Mr. Tony Fairfax; is that correct?

21   A. That's correct.

22   And if I could ask for a copy of the

1   report just so I have it before me when you're

2   asking me questions.

3   Q. I will do that. I only have one copy, but

4   I'm happy to share it with you.

5   A. Okay.

6   Q. Specifically, your focus in your report

7   was on what we in the voting rights field refer to

8   as Gingles prong 1, correct?

9   A. Correct.

10   Q. Now, when were you first retained by the

11   City of Virginia Beach? What month?

12   A. I'd have to check my records on that.

13   Within the past few months.

14   Q. Okay. So it was in 2019 for sure?

15   A. Yes.

16   Q. Okay. And do you have a retainer letter

17   between yourself and the city regarding your

18   contract with the city to serve as an expert?

19   A. I recollect having one, yes.

20   Q. Okay. And does it specify your hourly

21   rates, do you know?

22   A. I'm sure it does.

Transcript of Peter A. Morrison, Ph.D.
Conducted on September 24, 2019   11

1   Q. Okay. And just for the record, your

2   hourly rate for non-testimonial work; that is,

3   preparing your report and doing research and

4   analysis necessary for the report, is a $250

5   hourly fee you're charging, correct?

6   A. Correct.

7   Q. And for deposition testimony and trial

8   testimony it's $400 per hour, correct?

9   A. Correct.

10   Q. And those are your standard rates, aren't

11   they?

12   A. Those were the rates at the time that I

13   signed the contract, yes.

14   Q. Is that somewhat typical of the rates

15   you're charging these days as opposed to 20 years

16   ago? I know you've been doing this for a long

17   time.

18   A. It's above what I was charging 20 years

19   ago. Going forward, I've increased my rates

20   slightly.

21   Q. And when was the last time you increased

22   your rates?

Transcript of Peter A. Morrison, Ph.D.
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1   A. Very recently. I think in the last

2   engagement that I was asked to get involved in I

3   decided to increase my rates simply because I want

4   to cut back on how many cases I'm involved in.

5   Q. I see.

6   Well, we'll get into some of those cases

7   later. And I'll be happy to share with you the

8   listing, Attachment A to your report, that you

9   gave us so you can look over it if I have

10 questions about it.

11   A. Fair enough.

12   Q. Now, in your report you said that your

13 evaluation relied on the following sources. And,

14 then, looking at page 1 -- and I'm not going to

15 mark your report as an exhibit, but I will just --

16 I'm happy to share it with you. In paragraph 2

17 you list the five sources of information. Is that

18 still correct?

19   A. Yes, it is.

20   Q. Now, essentially they are, 1, official

21 demographic data from the Census Bureau; 2, data

22 provided to you at your request by Mr. Kimball

1   Brace. Number 3 was the plaintiffs' Complaint and

2   Mr. Fairfax's expert report. Number 4 was the GIS

3   shape files and demographic data that plaintiffs

4   have provided, which you say Mr. Fairfax

5   purportedly used or relied upon. And number 5,

6   the U.S. Census Bureau technical documentation

7   pertaining to the American Community Survey.

8   Is that still the information that you

9   relied on in preparing your report?

10   A. Yes.

11   Q. Okay. Now, when you say that, in number

12   5, the technical documentation pertaining to the

13   ACS -- I'm going to use ACS as the abbreviation

14   for the American Community Survey. And that's

15   what it's commonly referred to in many instances,

16   correct?

17   A. Yes.

18   Q. Okay. Did you provide us with the

19   technical documentation pertaining to ACS?

20   Because I didn't see it attached.

21   A. I didn't provide it because it's almost an

22   infinitely large universe of materials. What I'm

Transcript of Peter A. Morrison, Ph.D.
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1   saying there is that I relied upon published, as

2   well as online, resources that the Census Bureau

3   has where they in a number of different topics

4   will have a link where they will refer you to a

5   whole history of technical documentation.

6   I can be more specific by saying that the

7   standard documentation that is out there in hard

8   copy form that you can download is a series called

9   COMPASS, C-O-M-P-A-S-S, is my recollection. And

10   these are a series of handbooks and manuals that

11   are geared to different audiences that range from

12   general public audiences to specialists working

13   with census data. And they all have the common

14   heading COMPASS. As I say, that's my best

15   recollection.

16   Q. Is there anywhere in the report that the

17   specific documentation that you actually looked at

18   in preparing this report are cited?

19   MR. HARRIS: Objection to foundation.

20   A. I don't recall citing the technical

21   documentation -- any specific technical

22   documentation, although I may have cited it in a

1   footnote.

2   Actually, on page 4 of my report, footnote

3   1, that's one of the links that I cited that had

4   to do with the Census Bureau's raking technique,

5   which is a particular application of iterative

6   proportional fitting. So that would be one

7   example of citing a particular technical document

8   that pertained to something that I was working

9   with. And let me see if there are any others

10   here.

11   I don't see any others. That appears to

12   be the only one in my report.

13   Q. Let me see if I can cut to the chase just

14   so we can move on.

15   Did you rely on anything -- any other

16   technical documentation regarding ACS, other than

17   the footnote 1 on page 4, for this report?

18   A. My answer would be that I have relied upon

19   a broad array of technical documents that I know

20   the Census Bureau has published. And I have not

21   footnoted it.

22   It's as though -- if you had asked are you

1   relying on the cumulative knowledge you have about

2   the American Community Survey, the answer to that

3   would be, yes, I am. And that cumulative

4   knowledge encompasses dozens, if not hundreds, of

5   technical documents that I know the Census Bureau

6   has published. And I would access this by simply

7   asserting the term American Community Survey in a

8   dialogue bar and saying please list all the

9   documents so I can decide which one I want to go

10 back to.

11   Q. So let me see if I can make sure I

12 understand what you just said.

13   So you have a body of knowledge about ACS

14 technical documentation, correct?

15   A. Correct.

16   Q. All right. And in preparing this report,

17 even though you may not have looked back at the

18 ACS document itself or the technical documentation

19 within the website, you have a working knowledge

20 of it, and you applied that working knowledge in

21 preparing your report? Fair enough?

22   A. Correct.

1   Q. And you did not evaluate Gingles prongs 2

2   and 3, correct, in this case?

3   A. I was not asked to do so, no.

4   Q. So the answer is no?

5   A. Correct.

6   Q. Okay. Now, do you understand -- what is

7   your understanding of what Gingles prong 1 is, the

8   one you did -- you were called to evaluate?

9   A. Gingles 1 poses the question is it

10 possible to form a district in which the minority

11 group in question constitutes a majority of

12 eligible voters in that district.

13   Q. And that's your understanding of Gingles

14 prong 1?

15   A. That's my understanding.

16   Q. And you're not rendering a legal opinion

17 today, correct?

18   A. I'm not a lawyer, so I don't render legal

19 opinions.

20   Q. Okay. And you stated that Gingles prong 1

21 involves whether a district can be created in

22 which minority voters constitute a majority of

Transcript of Peter A. Morrison, Ph.D.
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1   eligible voters, correct?

2   A. Correct.

3   Q. I'm interested in how you came to believe

4   that the Gingles prong 1 only applies to eligible

5   voters as opposed to persons or -- voting age

6   persons.

7   A. The concept that is put forth in Gingles

8   1, according to my understanding of it, is

9   eligible voters because eligible voters are the

10   ones who would signify the minority group's

11   ability to elect candidates of its choice. People

12   don't elect the minority's candidates of choice.

13   Voting age persons are not the exact group that

14   elect the minority group's candidates of choice.

15   It's only the persons -- adult persons who are

16   eligible to vote, which is to say those who are

17   citizens and of voting age who can express the --

18   who can register the eligible -- I'm sorry -- who

19   can register the minority group's preferences for

20   a candidate of choice.

21   Q. Are people who are 18 and above eligible

22   to vote?

Transcript of Peter A. Morrison, Ph.D.
Conducted on September 24, 2019   19

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 1          MR. HARRIS:  Objection to form.

 2      A. Not all of them necessarily.

 3      Q. But are they eligible to vote in some

 4  instances?

 5      A. If they're not citizens, they're not

 6  eligible to vote.

 7      Q. Well, let's take away that group for a

 8  second.  Everybody who is a citizen who's 18 and

 9  over, are they -- whether they're registered or

10  not, are they eligible to vote?

11          MR. HARRIS:  Objection to form.

12      A. I believe they are eligible to vote if

13  they are voting age citizens.

14      Q. Okay.  And are you aware of the case law

15  that's out there, having analyzed Gingles prong 1

16  in this case, that deals with whether or not the

17  majority in an illustrative demonstration district

18  has to be comprised of a citizen voting age

19  population in some cases, in other cases the

20  threshold is voting age population?  Are you aware

21  of that distinction in the case law?

22          MR. HARRIS:  Objection to form.
```

1   A. I'm aware of the distinction you refer to.

2   But it's my understanding that voting age persons

3   or total persons or any other metric that is

4   measured is a proxy for eligible voters.

5   Q. Are you aware of any -- and you've looked

6   at some -- you've read Gingles, I assume?

7   A. At some point in my career, yes.

8   Q. And you've written about Gingles prongs 1,

9   2, and 3, correct?

10   A. I have referenced them, yes.

11   Q. Okay. And you've published articles with

12   other political scientists that reference the case

13   law, Gingles among other cases?

14   A. I have coauthored articles with people who

15   are political scientists and people who are

16   demographers.

17   Q. And they reference case law like Gingles,

18   for example?

19   A. Well, they reference the Gingles factors.

20   I don't know that I've actually footnoted the case

21   law, but I've referred to them as legal

22   requirements.

1   Q. And you've discussed demographic analysis

2   within the context of those cases, Gingles and

3   others, correct?

4   A. Yes.

5   Q. Okay. And are you aware of any Supreme

6   Court case that says that the majority in a

7   demonstrative district has to be a majority of

8   citizen voting age population?

9   MR. HARRIS: Objection to form.

10   A. I am not conversant with the case law. I

11   leave that to the lawyers.

12   Q. Okay. So you don't know one way or the

13   other? Is that what you're saying?

14   MR. HARRIS: Objection to form.

15   You can answer.

16   A. No. That's not what I'm saying. As I

17   say, my understanding would be that if one were to

18   use one of the proxies that I mentioned, that

19   those proxies have been accepted as proxies where

20   there was no better measure or where there was no

21   more precise measure, and that those proxies have

22   served as measures that can suffice to satisfy

1   Gingles 1.

2   I would add to that, that it's my

3   understanding that if one had access to a proxy

4   measure that showed that Gingles 1 was satisfied

5   but that the actual measure of voting age

6   citizens, which is the measure in question, that

7   would be the more precise measure, led one to the

8   opposite conclusion, it would be my expectation

9   that the actual measure would be the one favored

10 in that instance where the two measures

11 conflicted.

12   Q. Are you aware of any case law in which

13 courts have held that voting age population alone

14 is sufficient to measure compliance or meeting the

15 threshold of Gingles prong 1?

16   MR. HARRIS: Objection to the form of the

17 question.

18   A. I know that there is case law referring to

19 instances where voting age population has been

20 used in instances where there was no better

21 measure. I am not a lawyer, so I have no idea how

22 that case law would bear on this case.

Transcript of Peter A. Morrison, Ph.D.
Conducted on September 24, 2019   23

1   Q. Okay. I want to go through for a few

2   minutes the Appendix A to your report which lists

3   the cases that you have worked on. I don't want

4   to spend a great deal of time on it. Let's just

5   see if I can go through it.

6   So it's a two-page attachment, Appendix A,

7   pages 9 to 10. I'm going to show it to you, but

8   I'm going to need it back to ask questions.

9   A. Okay.

10   Q. And I'll be happy to share it with you.

11   So you've looked at it. This is the

12   Appendix A to your report that I'm going to be

13   questioning you from?

14   A. Yes.

15   Q. So the first case involves Orange County,

16   Florida. And you did -- it says expert report on

17   behalf of the defendant. What was that case

18   about? Just as concise as you can be, please.

19   A. That was a -- my recollection of that was

20   it was a voting rights challenge to Orange County.

21   And in that case my recollection is I testified on

22   behalf of the defendant jurisdiction. And my

1   recollection is that the judge ruled in favor of

2   the defendant.

3   Q. And was that to challenge at-large

4   elections in Orange County? Do you remember?

5   A. I don't know if it was a challenge to

6   at-large elections or if it was about competing

7   plans. But I do know that it was about creating

8   districts. And I believe it was a challenge to an

9   at-large election, but I don't recall exactly.

10   Q. The plaintiffs in that case were Latino

11   voters, though, correct? Rios-Andino?

12   A. Well, certainly they have Spanish

13   surnames.

14   Q. And you don't remember who the plaintiffs

15   were in this case?

16   A. I'd have to look that up.

17   Q. Figgs v. Quitman County. There you

18   testified for Quitman County, correct?

19   A. That's my recollection.

20   Q. In the trial court?

21   A. I didn't really testify at trial because

22   my recollection is the plaintiff passed away

1   before the trial was held. I may be wrong on

2   that. I know there was a case in Mississippi. I

3   believe it was Quitman County. It dragged on for

4   a long time and finally, from my perspective, went

5   away.

6   Q. Okay. It says here that you did an

7   affidavit in support of the defendant's motion for

8   summary judgment in the case, but it doesn't say

9   that you testified at trial.

10   A. There was no trial, to my recollection,

11   but there were -- there was testimony filed by

12   affidavit.

13   Q. And that was a challenge to the

14   single-member County Board of Supervisors plan in

15   Quitman County, correct?

16   A. Again, I'd have to check my records on

17   that. It was a challenge to -- it was a challenge

18   by a plaintiff. And I remember evaluating

19   alternative plans.

20   Q. And the plaintiffs in that case, Mr. Figgs

21   and Mr. Jackson, were both African American? Do

22   you remember that?

1   A. I would have to check my records. I know

2   at least one of them was an African American.

3   Q. You don't have any information here today

4   that suggests otherwise?

5   A. No, I don't.

6   Q. Okay. The City of Yakima case in

7   Washington, you testified in that case on behalf

8   of the defendant? That was a challenge -- a

9   voting rights challenge, correct?

10   A. Correct.

11   Q. And the challenge was to the City of

12 Yakima's at-large citywide election scheme?

13   A. Correct.

14   Q. Okay. And you testified for the defendant

15 in that case?

16   A. Correct.

17   Q. And the plaintiffs were Latino voters,

18 Montes and Arteaga?

19   A. Yes.

20   Q. Arteaga, A-R-T-E-A-G-A, and Montes,

21 M-O-N-T-E-S.

22   U.S. v. Townhomes of Kings Lake HOA. That

Transcript of Peter A. Morrison, Ph.D.
Conducted on September 24, 2019   27

1   was a housing case, correct?

2   A. Correct.

3   Q. And it involves -- the United States hired

4   you in that case, DOJ?

5   A. Again, I'd have to check my records on

6   that. I know it was a case about housing. And

7   that's all I recollect.

8   Q. It says you prepared a declaration on

9   behalf of plaintiff, U.S. Department of Justice.

10 Does that sound right?

11   A. That sounds -- that sounds correct.

12   Q. And that was a case in which an HOA had

13 refused to rent an apartment to a family with a

14 number of children. Do you remember that?

15   A. Again, I'd have to check my records. That

16 sounds right.

17   Q. It didn't involve race or any other issue

18 other than family size, correct?

19   A. I cannot say for certain it didn't involve

20 race. I'll take that as a fair representation. I

21 remember it being about family size as the issue.

22   Q. The next two involve the same case. One

1   is called Evenwel v. Perry in the U.S. District

2   Court for the Western District of Texas in which

3   you prepared a declaration on behalf of the

4   plaintiffs. And the second one, Evenwel v.

5   Abbott, was a case that eventually went to the

6   U.S. Supreme Court. And you there did an amicus

7   curiae brief with other demographers in the U.S.

8   Supreme Court. Does what I've recited sound

9   correct to you?

10   A. Yes.

11   Q. Okay. And in that case the plaintiffs

12   were filing a challenge to Texas' State Senate

13   elections in which they used total population to

14   reapportion the State Senate districts, correct?

15   A. Correct.

16   Q. And the plaintiffs were arguing that

17   instead of using total population to redistrict

18   the State Senate seats under the 14th Amendment,

19   they were challenging that and claiming that it

20   should have been reapportioned on the basis of

21   citizen voting age population, correct?

22   A. I don't know if the word is should or

1   could. I recall our amicus brief saying --

2   addressing the question of could it be done. And

3   the answer was yes.

4   Q. And so your brief in the Supreme Court

5   supported the plaintiffs who had lost below,

6   correct?

7   A. It supported the plaintiffs, yes.

8   Q. And were they successful in the lower

9   court, in the three-judge court?

10   A. I don't know.

11   Q. Okay. And the plaintiffs did challenge,

12   however, the fact that using the total population

13   in their view violated the 14th Amendment,

14   correct?

15   A. I recollect that that was their argument,

16   yes.

17   Q. And you supported that both in the

18   District Court and the Supreme Court, correct,

19   that argument?

20   A. Let me just say what I did do.

21   Q. Okay.

22   A. Which is in that brief by demographers we

1   established a technical matter, which was that the

2   American Community Survey would suffice for the

3   purpose at hand in the case of the Texas

4   redistricting, that it was sufficient to be used

5   for the purpose that the plaintiff was claiming.

6   So it was an answer to a technical

7   question in which there was a controversy between

8   what the other side, including some directors of

9   the Census Bureau, retired, said could not be

10   done. And we said it can be done in the case of

11   Texas.

12   Q. And in saying that it can be done, what

13   you were saying, if I understand your testimony

14   today, is that it was actually statistically

15   possible to use citizen voting age population?

16   A. Correct.

17   Q. Okay.

18   A. I don't recall that we were saying it

19   should be done. We were simply saying if it were

20   necessary to do it, the argument that it can't be

21   done with the American Community Survey is a false

22   argument.

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1   Q. All right. And your testimony today is

2   that former Census Bureau directors had said that

3   it couldn't be done using the American Community

4   Survey data, correct?

5   A. Some retired Census Bureau directors said

6   that it couldn't be done. Other retired Census

7   Bureau directors did not add their name to that

8   statement.

9   Q. Some did apparently, correct?

10   A. Some added their names. Others refrained

11   from doing so.

12   Q. The next case is a case out of Illinois

13   where you did a declaration on behalf of the

14   defendant. And it's Kremmel, K-R-E-M-M-E-L, v.

15   Fairlife, LLC. And it's number 7 on your list.

16   A. Uh-huh.

17   Q. Do you recall what that case is about?

18   A. I think that -- I honestly can't recall.

19   It's a long time ago. And I think that may have

20   been a -- I don't know if that was a class action

21   case. I'd have to check my records on that.

22   Q. Okay. You can't --

1   A. It was a fairly brief engagement.

2   Q. Sitting here today, you can't recall what

3   the case is about?

4   A. No.

5   Q. The next one was Dr. Pankaj, P-A-N-K-A-J,

6   Jain, J-A-I-N, v. Coppell Independent School

7   District in the Northern District of Texas,

8   correct?

9   A. Correct.

10   Q. Do you remember -- you testified there on

11   behalf of the defendant School District?

12   A. Correct.

13   Q. And the plaintiffs were -- brought a

14   voting rights challenge, correct?

15   A. Correct.

16   Q. Was that a challenge to at-large

17   elections?

18   A. Yes.

19   Q. Okay. And the plaintiffs were minority

20   voters, correct?

21   A. Correct.

22   Q. Okay. And how did that case turn out, to

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1   the best of your recollection?

2   A. My recollection is that the report that I

3   filed established that the plaintiffs could not

4   satisfy the first Gingles prong, and that there

5   was a subsequent agreement between the plaintiffs

6   and the defendants to follow a recommendation that

7   I had made to defendants that the dispute could be

8   resolved by going to cumulative voting rather than

9   creating single-member districts.

10   And what happened was -- again, this is my

11   recollection. I may be getting it 90 percent

12   accurate. But my recollection is that the two

13   parties said it looks like the plaintiffs are

14   going to lose but we make this alternative offer.

15   The plaintiffs said we'll try in this immediately

16   upcoming election to run it by cumulative voting

17   and we'll see what happens, and if we don't see

18   the result we like or we're after we'll be right

19   back at you filing the case again.

20   They went to cumulative voting, and the

21   minority candidate -- I'm trying to think if I am

22   recalling this correctly. This is the case of

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1   Jain?
2       Q. Correct.  J-A-I-N.
3       A. I'm sorry.  I'm thinking of another very
4   similar case in Texas with a School District.  Let
5   me just take back what I said.
6           My recollection is that it was not
7   possible to establish a single-member district in
8   that case.  I take back what I said about what
9   happened thereafter.
10          There was another similar case in which
11  going to cumulative voting resulted in the
12  minority candidate getting elected in the next
13  election.  And, then, the following election
14  another minority candidate -- another Hispanic
15  candidate was elected.  So it proved that you had
16  a solution to what the plaintiffs wanted, but it
17  wasn't single-member districts.
18          And in the case of Jain, I think it was
19  simply a matter of they could not satisfy the
20  first Gingles prong.
21      Q. And I should have said this earlier.  The
22  listing of cases in Appendix A, those are only the
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1 cases that you have testified at trial or by

2 deposition or by an expert witness affidavit since

3 2012, correct?

4   A. Correct. If that's what it says on the --

5 is that what it says?

6   Q. It says August 2012.

7   A. That's correct. I've got several

8 versions.

9   Q. So it would be -- the one example you're

10 thinking of on cumulative voting could have been

11 before 2012?

12   A. I'm pretty sure it was after 2012. But

13 keep going through the cases. Maybe it's the next

14 one in line.

15   Q. I don't see any other Texas cases, other

16 than the Harding v. County of Dallas case which I

17 know is not the case you're referring to.

18   A. That's correct.

19   Q. We'll get to it.

20   A. All right.

21   Q. All right. So number 9 is the City of

22 Pasco case in Washington, the State of Washington.

1   A. Correct.

2   Q. And you did a declaration that says on

3   behalf of the defendant, and the court ruled in

4   favor of the defendant in that case --

5   A. Correct.

6   Q. -- is what it says?

7   Did you -- can you tell me what that

8   case -- was that a challenge to at-large

9   elections?

10   A. Yes. That's my recollection.

11   Q. And do you remember who the plaintiffs

12   were?

13   A. I don't remember who they were, but I

14   believe it was a Hispanic plaintiff.

15   Q. Okay. Bishop v. Shorter University, Inc.

16   This is in the Northern District of Georgia. You

17   did a declaration in the federal court there on

18   behalf of the defendant. Do you remember what

19   that case was about?

20   A. That was a case of students -- it had

21   nothing to do with race is my recollection. It

22   was about students who had been somehow

1   shortchanged by the university and there was a

2   class action matter.

3   Q. I see.

4   Feldman v. Arizona Secretary of State.

5   This is an Arizona case where you testified on

6   behalf of the Arizona Secretary of State or did a

7   declaration, it says, correct?

8   MR. HARRIS: Can I make a recommendation?

9   I had the paralegal bring another copy. If you

10   want to look at it, I don't mind. That way we

11   won't have to do back and forth.

12   MR. HEBERT: Sure. He can look at that.

13   Thank you for the accommodation. We'll make --

14   hopefully speed it up.

15   Q. And we're at Appendix A.

16   A. Right. The --

17   Q. I was asking you --

18   A. About the Arizona case.

19   Q. About the -- which is number 11 on your

20   list.

21   A. I will have to check my record on that. I

22   don't have any recollection what that was about.

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1   It probably was about something to do with

2   districts, but it was, again, a very brief

3   engagement is my recollection.

4   Q. And the plaintiffs were voters who had

5   brought a lawsuit against the Secretary of State

6   challenging some action of the Secretary of State

7   or a redistricting plan, and you provided a

8   declaration on behalf of the Arizona SOS?

9   A. If you're telling me that's what it was,

10   that's within the realm of possibility, but,

11   again, I'd have to check my record.

12   Q. Okay. The next one is City of Costa Mesa

13   in California. This is a state court case in

14   Orange County, correct?

15   A. Correct.

16   Q. And what is that challenge about?

17   A. That challenge was about affordable

18   housing and the way in which the city was dealing

19   with people who were, basically, on the verge of

20   homelessness and were being housed in motels for

21   long-term stays.

22   Q. Is that case still pending?

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1   A. I believe it was settled.

2   Q. Okay. Because it says in your listing

3   here pending in the Superior Court of California.

4   A. That was the last I knew of it. It may

5   still be pending. I'm assuming it was settled,

6   but it could be pending.

7   Q. You provided deposition testimony, it

8   says, in that case, correct?

9   A. That's -- I don't know if it was a

10   deposition or just a report.

11   Q. It says deposition.

12   A. Does it? Okay. It was deposition

13   testimony. I know I filed a report, and then

14   there was a deposition. Yes.

15   Q. Who did you testify on behalf of there?

16   Was it the plaintiffs or the city?

17   A. It was on behalf of the city.

18   Q. Okay. The next case is Harding v. County

19   of Dallas. There you did a deposition, an expert

20   witness report, and trial testimony on behalf of

21   the plaintiffs, correct?

22   A. Correct.

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1   Q. And the plaintiffs in that case were

2   challenging the redistricting plan of Dallas

3   County, Texas, correct?

4   A. Correct.

5   Q. And the plaintiffs in that case were white

6   voters, correct?

7   A. Correct.

8   Q. And they were challenging the failure to

9   create two majority white or Anglo districts, as

10 they call them in Texas, in that case? That's the

11 basic challenge?

12   A. The basic challenge was that, as you've

13 just stated. And my recollection of it was a

14 novel theory, which was that everything that was

15 being done, cracking and packing and devaluing the

16 votes of the group in question, in this case

17 Anglos, was exactly congruent with what the Voting

18 Rights Act forbids being done to a protected

19 minority.

20   So it was like saying if you change the

21 name Anglo to black this would be a classic

22 example of a voting rights case in which the court

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 1   would want to give relief to the disadvantaged

 2   group.  And it presented that as, to me, an

 3   interesting kind of ambiguity in how the law

 4   works.

 5        Q. I see.

 6           And the court ruled -- the trial court

 7   ruled in favor of the county in that case,

 8   correct?

 9        A. I don't know that that's the case.  I know

10   that the argument that was being presented by my

11   client was not the argument that prevailed.

12        Q. Okay.  You have -- you provided me the

13   cite here.

14        A. Right.

15        Q. So we can pull up the decision later, in

16   some other context.

17           Pico, P-I-C-O, Neighborhood v. City of

18   Santa Monica.  Here you say you did a deposition

19   and trial testimony on behalf of the city

20   defendant in the Superior Court of Los Angeles

21   County, correct?

22        A. Correct.
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1   Q. What was that challenge about, that legal

2   case?

3   A. That was a challenge brought under the

4   California Voting Rights Act which, as you may

5   know, has a different set of requirements or its

6   requirements do not align exactly with those of

7   the Federal Voting Rights Act.

8   Q. Uh-huh.

9   A. And in that case my testimony on behalf of

10   the defendant city was that it was not possible to

11   form a district in which the minority in question

12   could come anywhere near a majority of the

13   eligible voters and could not, in fact, enable the

14   minority or minorities in question to elect their

15   candidates of choice.

16   And that posed a conflict between what

17   the -- what Gingles 1 would present from the

18   Federal Voting Rights standard and the California

19   Voting Rights standard, which is you don't have to

20   have a majority, you just have to have polarized

21   voting, for which there apparently is little or no

22   case law saying, well, there may be polarized

1   voting but there may be no solution to it.

2   Q. What was Pico Neighborhood?

3   A. Pico Neighborhood was -- it was the name

4   that was put on an area of the City of Santa

5   Monica that recognized itself as where many of the

6   Hispanics in the city had resided and where there

7   was a cultural tradition of Hispanic residents.

8   But it was, by no means, the only area of the city

9   where Hispanics resided. In fact, most Hispanics

10   resided outside of the Pico neighborhood.

11   Q. Is that case still pending?

12   A. Still pending. It's on appeal.

13   Q. And so the trial court ruled which way?

14   Do you recall?

15   A. The trial court ruled in favor of the

16   plaintiffs. And the defendants took it up on

17   appeal.

18   Q. And it's pending now?

19   A. Correct.

20   Q. And I listened carefully to what you said.

21   I want to make sure I understand. Your argument

22   was, basically, even though the California Voting

1   Rights Act doesn't have the Gingles prong 1, 2,

2   and 3 test, it just has racially polarized voting,

3   you were arguing that the reasons for having

4   Gingles prong 1 should apply in that case? Is

5   that essentially right?

6   A. No. I was not arguing anything about what

7   law should apply. I was simply providing data

8   that demonstrated -- that clarified the

9   ambiguities in the law that needed to be resolved.

10   Q. I asked my question in a pretty inartful

11   way. Let me see if I can go back and make it a

12   little bit better.

13   I didn't mean to suggest you were asking

14   for the law to be applied, the Gingles prong 1 law

15   to be applied. But the factor of Gingles prong 1,

16   which is you have to create a district in your

17   view that has a majority of eligible voters, that

18   that was a policy that should apply in the case

19   brought by Pico Neighborhood; is that correct?

20   A. I'd rather restate my understanding of the

21   case, which is that the defendants were basing

22   their argument on the technical analyses that I

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1   did which enabled them to ask the court to clarify

2   the California Voting Rights Act so that they --

3   that it was clear why it was that they should go

4   to district elections when district elections

5   offered no solution to the problem that the

6   plaintiffs had called attention to. In other

7   words, there is a problem, but the solution that

8   you're mandating does not solve the problem.

9   That's my understanding of how the laws were in

10   conflict.

11   Q. Okay.

12   A. But, again, I'm not a lawyer, and so I may

13   be -- I may not be accurately stating it. What I

14   know is that I did a technical analysis that

15   informed the points that the -- that the

16   defendants were making.

17   Q. Let me go at it one more time. I

18   understand what you said. And you were responsive

19   to my question.

20   A. Thank you.

21   Q. I'm not saying you were evasive.

22   So your technical analysis in that case

1   was that even though there may have been racially

2   polarized voting, there was no real way to redress

3   any injury to the plaintiff group? Is that true?

4   A. I didn't say that explicitly. I believe

5   that's how my findings fit into the legal

6   argument. I'm just explaining what I think they

7   did with what I gave them.

8   Q. Yeah. And I'm really interested in your

9   findings, not what --

10   A. Okay.

11   Q. And your findings were that there was no

12   remedy really available for the plaintiffs in the

13   case?

14   A. Well, my finding was that you could not

15   create a district in which Hispanics could be much

16   more than about 30 -- my recollection is 32

17   percent of the eligible voters.

18   And another finding was that even if you

19   added Hispanics and blacks together, you still

20   fell far short of anything approaching, you know,

21   the mid -- mid-40 percent or higher, anywhere near

22   50 percent.

1   And a third finding was that in creating

2   any district where the effort was a single-minded

3   effort to create either Hispanics alone or

4   Hispanics and blacks together, it had the effect

5   of devaluing the votes of the majority of

6   Hispanics in the city who lived elsewhere because

7   they were effectively submerged among -- in

8   territory that was very heavily Anglo, so their

9   voice was pretty much drowned out elsewhere in the

10 city.

11   And so I pointed the -- I pointed out

12 those paradoxical consequences of creating a

13 district, that in order to empower or to seek to

14 empower one group or two groups together the

15 consequence was to devalue the votes of many or

16 most of the members of the groups who lived

17 elsewhere in the city, thereby achieving exactly

18 the opposite purpose. And that was the dilemma

19 that I emphasized in my report.

20   Q. Okay. The next case on the next page, 15,

21 is Thomas v. Phil Bryant. This is a Southern

22 District of Mississippi case. And you did

1   deposition and trial testimony on behalf of the

2   defendants. Do you recall what that case was

3   about? It looks like it was filed in 2018.

4   A. Yes. That was a challenge to a particular

5   State Senate district, I believe. And it was

6   about that one district, not about the plan, the

7   whole plan.

8   Q. And did the plaintiffs in that case -- was

9   that case an allegation of gerrymandering, racial

10   gerrymandering?

11   A. I think that was pretty much what it was

12   about, yeah. It was about gerrymandering and the

13   effects on the -- the degree to which black

14   eligible voters were cracked or packed -- packed

15   or cracked in one or another district.

16   Q. And you testified for the defendants in

17   that case? That was the State of Mississippi?

18   A. Correct.

19   Q. Okay. The next case is -- that case has

20   been decided, correct, that Mississippi case?

21   A. Yes.

22   Q. The court did find there that the district

1   was, in fact, racially gerrymandered?

2   A. Well, it ruled against the defendant.

3   That's all I know.

4   Q. Okay. S&R Development Estates is the next

5   case, against the Town of Greenburgh in New York.

6   A. Correct.

7   Q. What's that case about?

8   A. That is an ongoing case that has to do

9   with an effort to -- by the plaintiffs to build an

10   affordable housing apartment unit in a particular

11   area of Greenburgh in which the city has not

12   permitted them to do so.

13   Q. And that's an ongoing case?

14   A. That's an ongoing case.

15   Q. You submitted a sworn declaration on

16   behalf of the town?

17   A. Correct.

18   Q. All right. Thank you for --

19   A. You're welcome.

20   Q. -- going through those with me.

21   Let's turn to your report on the front

22   page, paragraph 5. It says, All conclusions

1   contained within my following report are to the

2   reasonable degree of scientific certainty (at

3   least 90 percent certain) that scholars and

4   experts in my field use.

5   Correct? Did I read that correctly?

6   A. Yes, you did.

7   Q. So which of your conclusions do you think

8   do not, if any, fall within a reasonable degree of

9   scientific certainty? Because you say at least 90

10   percent, so I assume there are some that don't.

11   A. I would say that having reviewed

12   Mr. Fairfax's initial report, which is the only

13   report that I've had an opportunity to review, I

14   do not have -- he has not provided in his report

15   any statement of what the confidence intervals are

16   around the minority percentage shares of eligible

17   voters that he calculated. So that's an open

18   question whether a parameter of 50.04 percent or

19   49. -- well, let's just take his parameters which

20   were, if I recall, 50 percent plus a fraction.

21   Q. 50 percent?

22   A. Yeah. He has not provided any information

1   about the margins of error around those fractions.

2   So I would say the percentages that I referred to

3   as razor-thin majorities are, basically, from what

4   I can tell, a simple flip of the coin. It may be

5   that it's slightly likelier than not that they are

6   a majority, but they certainly would not -- I

7   would -- if I had numbers like that, I would not

8   testify that the estimate shown allows me with a

9   reasonable degree of scientific certainty to say

10 that the tripartite minority constitutes a

11 majority of eligible voters based on what he's

12 provided in that initial report.

13   Q. So let me see if I can follow what you

14 just said.

15   So you have concluded that based on

16 Fairfax's report and, then, your own calculations

17 that you've done, the likelihood that the two

18 illustrative districts that he has created are

19 majority minority; that is to say, they achieved

20 the 50 percent level, that's, basically, a coin

21 flip, a 50/50; is that right?

22   A. It's not quite correct. What I'm saying

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1   is that the number that he presents, which is

2   50. --

3   Q. 50.03.

4   A. -- 50.03, that that is a point estimate.

5   And it is an estimate of an underlying true

6   percentage that may be slightly above or slightly

7   below. And if it's slightly below or above, I

8   need to know, based upon that margin of error, how

9   confident can he be that it is, in fact, above

10 50.00000 percent; in other words, exactly 50

11 percent. How confident can he be that it's a

12 razor-thin majority, as he says? Quite apart from

13 any other factor, just a purely technical, if the

14 thermometer reads 50.03 do we really know it's

15 above 50? What's the chance of that? And I'm

16 saying he has not presented the necessary margin

17 of error that would allow me to answer that

18 question.

19   I can tell, just by looking at the number,

20 that it is perilously close to 50. -- exactly 50

21 percent or -- and it may well satisfy some level

22 of confidence which might be -- it's a little bit

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1   likelier than not that it's a majority, but it's

2   more like a coin flip. It certainly is far short

3   of what I refer to as the reasonable degree of

4   scientific certainty standard that anybody in my

5   field would normally apply.

6   Q. Are confidence levels and margins of error

7   the same thing?

8   A. No, they're not, not in a technical sense.

9   Q. Okay. How are they different?

10   A. The Census Bureau publishes, for the

11 American Community Survey, the numbers that we

12 use, which it refers to as estimates of a number

13 or a percentage. And each of those numbers or

14 percentages is accompanied by a margin of error,

15 which is usually shown as an MOE. The MOE is the

16 basic statistic that any analyst can use to

17 calculate confidence intervals. So there is a

18 distinction between a margin of error and a

19 confidence interval.

20   A margin of error is a standard statistic

21 that anyone can use to compute a confidence

22 interval for any level of confidence. So if I

1   were interested in the 90 percent level of

2   confidence, the margin of error happens to be set

3   at that particular level. If I wanted to be

4   confident at the 95 percent level of confidence,

5   scientific certainty, I would use the margin of

6   error and do a further calculation.

7   Q. So you can adjust the margin of error

8   which will, in turn, affect the confidence

9   interval, correct?

10   A. The best way to understand the margin of

11   error is it's as though you were using the world

12   standard or the physics standard of temperature

13   and they said the temperature is X degree Kelvin

14   or something that you and I don't normally use.

15   You say, well, what does that translate into in

16   terms of Farenheit? That's what I normally listen

17   to. The answer is, well, you just multiply it by

18   something and that gives you what you want. So

19   it's, kind of, a standard that's used in the

20   field.

21   A margin of error is the standard. Any

22   statistician or analyst can use it, set it to get

1   any -- to get it in any language that one wants

2   for levels of confidence.

3   Q. So you can set the margin of error in the

4   way that you want to have adjust the confidence

5   level? Is that what you're saying?

6   A. The margin of error is the basis for

7   calculating the confidence level you want. In my

8   case, the 90 percent confidence level happens to

9   coincide with the margin of error, so I don't need

10   to do a calculation on the published estimate.

11   But I would have to do it on the estimate

12   that I would come up with when I combine different

13   pieces of geography together to form a district.

14   So each piece of geography has its own margin of

15   error. So when you put together 100 pieces of

16   geography, a lot of blocks, census blocks, you

17   have to engage in a complicated calculation to get

18   the margin of error. And I would have expected

19   Mr. Fairfax to have provided that estimate so that

20   I could evaluate his estimate of 50.04 or whatever

21   it was.

22   Q. Can you turn to page 7 of your report for

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1    me, please?  And there is a chart there I want to

2    ask you about.

3         A. Yes.

4         Q. This is, as I understand it, your --

5    you've created or evaluated the two districts that

6    Mr. Fairfax proposed, and you have come up with

7    slightly different numbers, percentages, correct?

8         A. Correct.

9         Q. 49.99 for District 1 and 49.96 for

10   District 2, correct?

11        A. Correct.

12        Q. Where in this report are your margins of

13   error?

14        A. In this case, for my purposes I don't need

15   to know anything about the margin of error because

16   the actual estimate is just very, very slightly

17   below 50 percent, so it meets the standard of

18   likelier than not of being below 50 percent.  And

19   by logic, that means it rules out the possibility

20   that one could have a high level of confidence

21   that 49.99 means that it is with a high degree of

22   confidence above 50.
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1   So I don't need to do the margin of error

2 calculation unless it's at or above 50 percent to

3 say, well, is it really above 50 percent. Here

4 it's -- by logic, by simple logic, it's below 50

5 percent. But there is some -- there is some

6 chance that it could be above 50 percent, but

7 certainly nowhere near 90 percent certainty that

8 it's above 50 percent.

9   Q. I thought that margins of error were

10 really something that gave a range to the point

11 estimates.

12   A. That's correct.

13   Q. And you've come up with point estimates of

14 49.99 and 49.96, correct?

15   A. Correct.

16   Q. Now, what's the range there?

17   A. I could calculate that, but it's a long

18 calculation. But as I say, for my purposes of

19 saying -- if I -- whatever range I calculated, is

20 it possible that I could reach -- that one could

21 use this number and say it demonstrates that

22 Mr. Fairfax still would have satisfied Gingles 1?

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1   And the answer is by simple logic I can rule it

2   out as he could say it's possible but he cannot

3   say with any degree of scientific confidence that

4   it is above 50 percent.

5   Q. What I'm failing to understand is you say

6   it's a matter of simple logic. But I don't

7   understand how you can say that you're confident

8   that 49.99 and 49.96 are accurate but 50.03 and

9   50.04 are not. I don't understand why one is and

10 one isn't. Can you help me?

11   A. I'm not saying that they are accurate or

12 not. I'm simply saying, do they satisfy Gingles

13 1? Would they satisfy Gingles 1? And my answer

14 in the case of Mr. Fairfax's numbers would be, do

15 they satisfy Gingles 1? It remains an open

16 question.

17   When I reconstruct his plan, assuming

18 that, you know, premised on the assumption that my

19 reconstruction is more accurate than his, which,

20 again, he may dispute, judging from my

21 reconstruction I can conclude that it is beyond

22 the realm of scientific certainty that it could

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1   possibly equal or exceed 50 percent.

2   Q. Your calculation of 49.99 and 49.96, isn't

3   it possible that the range around those point

4   estimates could be 47.99 up to 51.99?

5   A. Absolutely.

6   Q. Okay. And so it's possible -- and you

7   can't really say one way or the other whether or

8   not it's over 50 or not because the -- confidently

9   because we haven't really looked at the margin of

10   error on the confidence intervals here of 49.99

11   and 49.96; is that true?

12   A. What Table 3 allows me to assert with a

13   high degree of confidence is that it is not

14   possible from the data in Table 3, as I have

15   reconstructed them, to conclude that either

16   district -- that in either district the tripartite

17   minority constitutes a majority of eligible voters

18   at a scientific level of certainty; that is to

19   say, with 90 percent certainty.

20   I could say -- it is possible to say there

21   is close to a 50/50 case that it might be a

22   majority.

Transcript of Peter A. Morrison, Ph.D.

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 1         Q. You say it's a coin flip?

 2         A. Yeah.

 3         Q. You do say 50/50?

 4         A. It could be a majority or it is equally

 5    likely that it is not a majority.  And what I'm

 6    saying is if I'm asked at trial to say do you know

 7    with a high level of -- with a scientific level of

 8    confidence, which is what you apply, whether this

 9    district is or is not a majority of the minority

10    in question, my answer is it could be either one,

11    but I cannot say with confidence that it is a

12    majority.

13         Q. So you said that you had a high degree of

14    confidence in the numbers you've produced here on

15    page 7, correct?

16         A. I have a high degree of confidence with

17    the numbers in Table 3 because I have

18    reconstructed them independently using his flawed

19    dataset.  Now, it -- and I'm -- I'm premising this

20    on the assumption that his flawed dataset, when

21    properly disaggregated and reaggregated yields

22    these results, they differ very little.  However,
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 1    I don't know what else is going on in the flawed

 2    dataset.  In other words, I'm just looking at what

 3    it all adds up to.  But it is composed of

 4    individual blocks that have troubling ambiguities.

 5         And demographers are preoccupied with

 6    evaluating the quality of the data they work with

 7    before they draw conclusions from the data that

 8    they -- when they add it up.  So the first thing

 9    we look at as demographers is, are we working with

10    a dataset you can have confidence in?

11         And in going over his work I looked at the

12    individual blocks, and I said we're putting

13    together a number of blocks here that are

14    obviously wrong.  When you add it all up, do the

15    differences matter?  I don't know.  I cannot have

16    confidence in his dataset.  That's my message.

17      Q. In using the same dataset, you can't --

18    you don't have any confidence intervals for your

19    49.99 and 49.96, correct?

20      A. But as I said, I don't need them.  They're

21    not -- for my purposes, I don't need them.

22      Q. Right.  But I guess what I'm driving at
```

1   here is that you don't have any confidence levels

2   on the 49.99 and the 49.96 that's reflected in

3   Table 3 because you're using the same dataset that

4   Mr. Fairfax used? Am I understanding that

5   correctly?

6   A. No. That's not the reason that I don't

7   have the confidence intervals. I don't need to go

8   to the trouble to calculate them. It's not my

9   burden to show anything other than the number

10 itself is reading below 50. And if you said,

11 well, what could you conclude from that, I can say

12 I can conclude, without having to calculate

13 confidence intervals, that if one accepts my

14 numbers in Table 3 as the accurate ones, the

15 correct ones, if Mr. Fairfax were to say, okay,

16 we'll go with Morrison's numbers in Table 3, if he

17 says he believes them, then he can't conclude with

18 any scientific confidence that it's a majority.

19 And it follows logically because the number

20 itself --

21   Q. Is below 50 --

22   A. -- is below 50 percent. I don't need to

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1   calculate the confidence intervals on my numbers.

2   He needs to calculate them on his numbers insofar

3   as they exceed 50 percent to establish that he has

4   high scientific confidence that they exceed 50

5   percent. He hasn't provided me with that. And

6   I'd be happy to take a look at his estimate if he

7   provided that confidence interval, but there is a

8   lot of work that goes into it and I'm -- I haven't

9   done that. That's his burden.

10   Q. Does Maptitude calculate confidence

11   intervals?

12   A. I don't know.

13   Q. Okay.

14   A. And if it does, I would want to know how

15   it does. Mr. Fairfax -- Mr. Fairfax's approach is

16   to say, well, it says that if I push the button

17   and say give me this number, that's all I have to

18   worry about. I just push the number and -- push

19   the button and get the number.

20   Again, demographers would want to know,

21   well, how did Maptitude calculate that number?

22   And Mr. Fairfax has gone into great detail in his

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1   latest report that explains how they do it. And

2   he's also made the case that there are a lot of

3   clients who purchased Maptitude and they use their

4   numbers. Well, that -- that says nothing about

5   whether Maptitude's algorithm is the one I would

6   want to use.

7   Q. What about Maptitude in terms of margins

8   of error? Are you aware that Maptitude calculates

9   margins of error or not?

10   A. I don't use Maptitude myself. I refer all

11   GIS work to a GIS person. I just -- I can't

12   answer that question.

13   Q. Okay. So you don't have any GIS training?

14   A. I don't have GIS training, but I know how

15   GIS works conceptually. And I'm able to look over

16   the shoulder of someone manipulating a GIS system

17   and give them exact instructions about what to do.

18   So, to me, it's a tool that someone uses to

19   calculate something in the same way I would rely

20   on a statistician or a data scientist to calculate

21   a margin of error under some circumstances.

22   Q. When you say you could look over the

1   shoulder and tell somebody what to do, you mean

2   you could tell them to move the line here or move

3   the line there?

4   A. Correct.

5   Q. But you can't actually -- you actually

6   don't know what keys to press in order to move

7   that line?

8   A. No. What I know is what happens when you

9   press the key. And I know that what happens when

10 you move a block from one district to another,

11 that all the arithmetic is taken care of because

12 before there was Maptitude and before there were

13 GIS systems I did it by hand. So I'm the guy who

14 actually did what the GIS system is doing. And I

15 verified that it's doing what I was doing manually

16 back in the '90s.

17   Q. And you utilize the services of a

18 colleague or a consultant that you hire to

19 actually press the right keys to move the blocks

20 within GIS?

21   A. Correct.

22   Q. But you don't do that yourself?

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1   A. I don't do that myself. I simply instruct

2   the person who does it exactly what to do and what

3   pieces of geography to aggregate together.

4   Q. How many hours did it take you to prepare

5   this report?

6   A. I would have to check my billing records.

7   Q. I'll just take an estimate for today.

8   A. All right. I'm going to take a -- it's

9   going to be a guesstimate with a G.

10   Q. Okay.

11   A. Let me just give some thought to this.

12   I would say from start to finish, by which

13 I mean reviewing Mr. Fairfax's report, evaluating

14 what he said, reconstructing his districts from

15 his data, drafting the report, revising the

16 report, assembling the data tables, my guesstimate

17 is that this would have been probably as much as

18 10 days of work.

19   Q. So when you say 10 days of work, are you

20 saying that you did all the work you just

21 described within 10 days or that it took you 10

22 total days to do it?

Transcript of Peter A. Morrison, Ph.D.
Conducted on September 24, 2019   67

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1        A. I'd say 80 hours.

2        Q. Okay.  So 10 eight-hour days, correct,

3   roughly?

4        A. Yeah.  Ten eight-hour days, let's say plus

5   or minus 50 percent.  That's my margin of error.

6        Q. Okay.  Is it your opinion that the

7   plaintiffs in this case haven't satisfied Gingles

8   prong 1 and can't do so under any circumstances?

9         MR. HARRIS:  Objection to the form of the

10  question, lack of foundation.

11       A. I was -- I was asked to review

12  Mr. Fairfax's initial report.  And based on that

13  report, my conclusion was that he had not

14  satisfied Gingles 1, 2, the standards --

15  scientific standard of certainty that people in my

16  field apply.

17        I know that he has filed some other stuff

18  very recently, which I have reviewed in a cursory

19  fashion and I haven't had a chance to evaluate.

20  So I view that as something that arrived too late

21  for me to really evaluate.  And I can only tell

22  you what else I need to know about the additional
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Transcript of Peter A. Morrison, Ph.D.
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1   plans that he's created.

2   Q. Are you referring to Mr. Fairfax's

3   rebuttal report?

4   A. I guess that's what it's called, yeah.

5   Q. And when did you get that?

6   A. I don't recall exactly when I got it. I

7   know that I was inundated with a huge amount of

8   material after my report was filed. And I recall

9   going through it just to see what it was all made

10   up of. It was downloaded from a -- from a special

11   link that I had to get.

12   And I recall seeing a lot of material that

13   involved Fairfax. And I would simply -- what I

14   remember doing was separating out the part that

15   had to do with Fairfax, and putting that into an

16   electronic folder for future examination, and

17   separating out everything else which I felt didn't

18   apply to what I had been asked to do.

19   And it was only really until yesterday, I

20   think, that I first went through his material in

21   detail to try to understand what it was that he

22   had presented. And I gather he's presented a

1   number of different plans, which I don't know why

2   he didn't present them beforehand. I've looked at

3   them. And he seems to have formed -- if I take

4   his numbers at face value, he seems to have formed

5   a number of different plans in which the margins

6   of error are not provided in those instances. I

7   would have -- you know, it's an open question as

8   to whether any of those plans would satisfy the

9   first Gingles 1 pre-condition. I have not had a

10   chance to evaluate it.

11   Q. And do you intend to do so?

12   A. If asked to do so, I will. I was not

13   asked to do so thus far in this case. I was asked

14   to simply evaluate the initial report that he

15   offered. And, then, I went on to other

16   obligations and deadlines that I had.

17   Q. So as of today, you haven't been asked to

18   do any analysis of the rebuttal report of

19   Mr. Fairfax?

20   A. I have not been asked --

21   MR. HARRIS: Objection to the question as

22   it relates to any attorney work product and

1   attorney-client privilege.

2   I instruct you not to answer that

3   question.

4   MR. HEBERT: Let me rephrase it because I

5   think I can get around that.

6   Q. I'm not asking whether or not your lawyers

7   asked you to do any. I'm asking you if at this

8   point in time do you envision yourself doing any

9   analysis of Mr. Fairfax's rebuttal report?

10   A. I don't envision doing any further

11   analysis. And, frankly, I don't have the time to

12   because I have other deadlines coming up this

13   week.

14   Q. Let me ask you this about the data that --

15   you said you were inundated with a lot of

16   information. Who gives you information, data, in

17   the case? For example, who provided you, on page

18   1 of your report, with Mr. Kimball Brace's data?

19   Did Mr. Kimball Brace provide that to you or did

20   that come from counsel?

21   A. The data from Mr. Brace, my recollection

22   is that I had requested at an early stage that

1   Mr. Brace provide me with information about the

2   boundaries of election precincts. And I put in

3   relying on that source in the eventuality that I

4   would actually look at those data were he to

5   provide them. I don't yet know if he has provided

6   them. And subsequent to filing my report, I think

7   I can say that I no longer need to rely on them.

8   But I may have received them, but I haven't looked

9   at them yet.

10   Q. So is it fair to say that you requested

11   the data from Mr. Brace but you didn't necessarily

12   rely on it because you didn't feel you needed to

13   to prepare this report?

14   A. That would be a fair statement, yes.

15   Q. Okay. I know I'm likely to mangle this

16   next question, so bear with me.

17   Is it your criticism of Mr. Fairfax's

18   initial report that he should have used Hispanic,

19   black, Asian CVAP shares of CVAP fraction --

20   fractionality or fractionally? Let me repeat it

21   just so we --

22   A. I'm afraid I don't understand what you're

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 1    getting at.

 2         Q. Is it your criticism of Mr. Fairfax's

 3    initial report that he should have used -- and I'm

 4    going to use the abbreviation -- HBA CVAP shares

 5    of CVAP fractionally?  Is that one of your

 6    criticisms of his report?

 7         A. I don't know what the term fractionally

 8    means in that sentence.

 9         Q. Okay.  Have you ever used the term

10    fractionally in terms of demographic analysis?

11         A. I'm sure I've used the work fractionally,

12    but it doesn't have any meaning in the sentence

13    you've just asked.

14         Q. Okay.

15         A. Maybe if you clarify.  Is there some point

16    where he uses that term?  I might be able to

17    follow what you're getting at.  And I'll try to

18    answer your question.

19         Q. Well, I'll come back to it after I look

20    through.  Maybe we'll take a break at some point

21    and I can find out where I concocted that

22    particular phrase.
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1   A. All right.

2   Q. Now, you have made a number of comments

3   today and in your report that Mr. Fairfax had a

4   "flawed dataset" or a defective dataset. Those

5   are two different ways of putting it. Is that

6   correct?

7   A. Correct.

8   Q. Is it the data that he used that was

9   flawed or was it his methodology using the data

10   that you believe was flawed?

11   A. It's the data that were flawed based on

12   how he constructed the data. So if he had a

13   dataset that was not flawed and his methodology --

14   the methodology he used had been applied to an

15   unflawed dataset, then I would not necessarily be

16   critiquing what he did the way I have.

17   A major part of my critique -- or I should

18   say one major critique in my report of how he

19   proceeded was to construct a dataset that had

20   obvious flaws without trying to evaluate the

21   quality of the data with which he was working.

22   And as I said earlier, demographers always start

1   with an evaluation of the quality of the data with

2   which they're working before they proceed to

3   analyze it and draw conclusions with scientific

4   certainty based upon the data.

5   Q. Mr. Fairfax, is it your understanding he

6   used ACS data as his database?

7   A. He used -- the data he used comes from the

8   American Community Survey, yes.

9   Q. And you're not claiming that the American

10   Community Survey data is defective or flawed,

11   correct?

12   A. I am not claiming that they -- that the

13   block group level data that they publish is

14   flawed.

15   Q. Okay. And he used the block group data to

16   then disaggregate down to the block level,

17   correct?

18   A. Correct.

19   Q. And that's where you have taken issue with

20   his methodology and, therefore, his data down to

21   the block level, correct?

22   A. Correct.

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 1          Q. Okay.  Good.

 2          Now, in paragraph 10 of your report you

 3     say that Mr. Fairfax's definition of a majority

 4     HBA district -- and just for the record, HBA is

 5     Hispanic, black, and Asian, correct?

 6          A. Yes.

 7          Q. You say that his definition of a majority

 8     HBA district is one in which the minority citizen

 9     voting age population is the combined Hispanic,

10     black, and Asian citizen voting age population of

11     the City of Virginia Beach.

12          Correct?

13          A. Correct.

14          Q. And that's your statement?  You still

15     believe that today?

16          A. Yes.

17          Q. Okay.  Then you go on to say that, This

18     "tripart minority coalition"...  And that's in

19     quotes.

20          A. Yes.

21          Q. Where did you get that quote?

22          A. It's a term that I put on it simply to
```

1   identify it as a three-part minority. The premise

2   behind HBA is that it is a minority -- it would

3   function as a minority coalition district; that is

4   to say, the three separate groups would vote

5   consistently together as -- and form a coalition

6   in such a district.

7   Q. Why did you put it in quotes, I guess?

8   Because there is no citation to where that quote

9   came from.

10   A. What I intended to convey here was the

11   embedded assumption that it would function that

12   way.

13   Q. Was it your understanding that

14   Mr. Fairfax's definition of a majority HBA

15   district is one that the minority citizen voting

16   age population has to be politically cohesive and

17   elect candidates of their choice?

18   A. I'm not -- I'm not saying that it has to

19   be for purposes of Gingles 1. I am simply

20   flagging it as this district for which I am simply

21   making a determination about Gingles prong 1 is

22   being presented for purposes of Gingles 2 and 3

1   for political scientists to evaluate as a "tripart

2   minority coalition district"; that is to say,

3   there is an embedded assumption here that they are

4   voting as a coalition district. And I'm calling

5   attention to that as an embedded assumption for

6   any other reader or any other analyst to be

7   cognizant of.

8   Q. But you yourself have not done any

9   political cohesion studies in Virginia Beach?

10   A. I'm not a political scientist. And I

11   don't presume to do that, no.

12   Q. And you haven't done any analysis of

13   racially polarized voting in Virginia Beach

14   yourself, have you?

15   A. No. I look to political scientists to do

16   that.

17   Q. All right. Your view is that the first

18   Gingles prong merely requires a plaintiff to show

19   that the minority group is sufficiently large and

20   geographically compact to constitute a majority in

21   a single-member district, correct?

22   A. To constitute a majority of the eligible

```
 1   voters in a single-member district.  That is the

 2   narrow, precise definition that I am focusing on

 3   in my analysis confined to Gingles 1.

 4       Q. So let's look at paragraph 11 in the

 5   second sentence.  Isn't it true that there you

 6   said that the first Gingles prong requires the

 7   plaintiff to show that the minority group is

 8   "sufficiently large and geographically compact to

 9   constitute a majority in a single-member

10   district"?

11       A. That is correct.  That is an accurate

12   statement.

13       Q. It doesn't say anything in that sentence

14   about eligible voters, does it?

15       A. I agree it does not say eligible voters.

16       Q. Okay.

17       A. But the --

18       Q. That's what I asked.

19       A. Yeah.  The unstated part of that

20   requirement is a majority of something.  And what

21   I'm clarifying is it's a majority of eligible

22   voters.
```

1   Q. That's your view, correct?

2   A. That's my interpretation of what the law

3 says, yes.

4   Q. And that "sufficiently large and

5 geographically compact to constitute a majority in

6 a single-member district" is directly out of the

7 Supreme Court of the United States decision in

8 Gingles, correct?

9   A. If that -- if -- if that is where I got

10 that quote from, and I believe it may well be,

11 that is what that -- that is directly out of the

12 Supreme Court decision.

13   Q. On that we will agree.

14   A. Right.

15   Q. Let's turn to page 3 of your report. And

16 here you present Table 7, which I take it is from

17 Mr. Fairfax's report, correct?

18   A. Correct.

19   Q. Okay. And, then, down below that, you

20 have Table 1 which is, I believe, your

21 calculations of the districts that Mr. Fairfax

22 created, correct?

Transcript of Peter A. Morrison, Ph.D.
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1   A. No. That's incorrect.

2   Q. Oh.

3   A. Table 1 is simply a copy of -- I think I

4   said the -- explained this.

5   Q. Paragraph 14 might help here a little bit,

6   Dr. Morrison.

7   A. Actually, I think I may have said it in

8   paragraph 13. I said the above Table 7 is from

9   his report, which I show below in Table 1. My

10   source of his working results -- I'm referring

11   there to Table 1 -- is page 68 in Fairfax Virginia

12   Beach City Council Illustrative Plan Appendices

13   7.5.19.

14   This is -- in other words, what I'm saying

15   is Table 1, shown on page 3 of my report, is taken

16   directly from material that Mr. -- that was

17   included as part of Mr. Fairfax's work product

18   that he then used. So I took his Table 1, Fairfax

19   demonstrative districts, and I said in this Table

20   1, which is directly his work, he identifies, in

21   the upper left-hand corner, District 01 and

22   District 02. And as you can see, the numbers in

1   those two rows, District 01 and District 02, if

2   you look over to the right under column 14, that

3   is where he obtained his data and the percentages

4   50.03 and 50.04.

5   So everything in Table 1 is his work

6   product. And I'm simply identifying where I

7   got -- where he got his numbers from so that I

8   could say you see he tried to put together the

9   different groups and these are the numbers he had.

10   So I'm working off of -- I'm identifying -- I've

11   discovered where his numbers were in the massive

12   materials that he turned over.

13   Q. So just so I make sure I understand what

14   you've said, that the Table 1, you are testifying

15   today that that table appeared in Mr. Fairfax's

16   data?

17   A. Correct. That table is part of the

18   material that was turned over to me via the big

19   download of the massive material that I received.

20   And I refer to that just as -- I want to anchor

21   everything I say to Table 1 on page 3 so I can

22   say -- when I talk about Fairfax's numbers, these

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1   are the numbers that he had as shown in his Table

2   1 that was turned over.

3   And, in particular, I make the point in

4   paragraph 14 that each of the districts featured

5   in his Table 1 shown in my report is composed of

6   individual census blocks. That's what I wanted to

7   show is that these are made up of individual

8   census blocks.

9   Q. And in your Table 3 in your report on page

10   7, that is your reconstituted Districts 1 and 2 as

11   you have disaggregated the data and then

12   reaggregated it in District 1 and 2?

13   A. That's correct. Table 3 in my report on

14   page 7 shows the corresponding -- the

15   corresponding variables that are shown in his

16   Table 1 on my page 3 but using the iterative

17   proportional fit method whereby I disaggregated

18   block group data to blocks and then reaggregated

19   them as he has done to form his districts.

20   Q. So let's stay with your Table 3 for a

21   moment. So let's look at District 1. You have

22   your total CVAP there, correct?

1   A. Correct.

2   Q. All right. It is true that the black,

3   Asian, and Hispanic total of 14,879 in that

4   district exceeds the white non-Hispanic total of

5   13,723, correct?

6   A. That's what it -- that's what Table 3

7   shows, yes.

8   Q. And District 2 shows, additionally, that

9   the black, Asian, and Hispanic total CVAP share is

10 16,389. And that's well over the white

11 non-Hispanic number of 15,564, correct?

12   A. Correct.

13   Q. So the actual black, Asian, Hispanic CVAP

14 population in that district -- those two

15 illustrative districts exceed the white

16 non-Hispanic population, correct?

17   A. That's correct.

18   Q. Okay.

19   A. And the reason for that is because there

20 are other categories of people that are not shown

21 here. There are people who are neither white

22 non-Hispanic nor black non-Hispanic nor Asian

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1   non-Hispanic nor Hispanic. And those would be all

2   other races. And also excluded here are, I

3   believe, people who are multiracial or more than a

4   single race.

5   Q. Right. I was about to get to that. Thank

6   you for bringing that up.

7   A. So the fact that one group outnumbers the

8   other is simply a statement about is the black

9   plus Asian plus Hispanic population, does that

10   number exceed the Anglo population? And the

11   answer is yes.

12   Q. Uh-huh. Okay.

13   In terms of multiracial categories, I

14   think you just used the word they were not

15   included in or I think you said they were excluded

16   from this table that we're calling Table 3 in your

17   report, correct?

18   A. Correct. They are not shown in that

19   table.

20   Q. Do you -- are you familiar with some

21   guidelines that were issued by the Federal

22   Government in terms of restricting data where

1 either the OMB or the Justice Department said that

2 if you have a person who identifies as black and

3 something else: white, Hispanic, Asian, whatever

4 it is, that they should be counted as black? Are

5 you aware of that guidance?

6   MR. HARRIS: Objection to foundation and

7 form.

8   A. I recall reading that somewhere. I don't

9 know if it's part of the law or the Federal

10 Regulations, but I know that that's a commonly

11 entertained point of view.

12   Q. You did not include that, though, in your

13 Table 3, page 7, that data?

14   A. No, because -- and my reason for not

15 including it is because in his initial report

16 Mr. Fairfax did not include it.

17   Q. But if you had included it; that is to

18 say, if you had included persons as black who had

19 identified as black and something else, the black

20 NH figure in District 1 and District 2 would

21 presumably be higher, correct?

22   MR. HARRIS: Objection to foundation and

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1   form.

2   A. The hypothetical calculation you're

3   presenting me with, I think you're correct from an

4   arithmetic standpoint, but that would have then

5   thrown this out of kilter, so it was not

6   comparable to Table 1 which is the actual way that

7   Mr. Fairfax was putting these different groups

8   together for his purposes. So I wanted to mimic

9   exactly what he had done.

10   Q. And if he had added in -- I assume what

11   you're saying is if he had added in as black those

12   who had identified as black and something else,

13   you would have done the same thing?

14   MR. HARRIS: Objection to form.

15   You can answer.

16   A. I know that he's done that in his most

17   recent work. And if I had to evaluate his recent

18   work, I would then adjust my comparison so then it

19   would be comparable to his.

20   Q. Okay. Thank you.

21   I printed out, and I'd like to have marked

22   as Morrison Deposition Exhibit No. 1, the database

1   spreadsheet you supplied to us. And I actually,

2   with Ms. Harless' help, had to tape it because the

3   spreadsheet was too wide and my skill level was

4   not sufficiently acute that I could put it all on

5   one page. So let me --

6   A. There is a way to do it. But I agree, I

7   don't know how to do it either.

8   (Exhibit 1 was marked and

9   attached to the transcript.)

10   Q. In Exhibit 1 that was just handed to you,

11   Dr. Morrison, I want to just go through and make

12   sure I have an understanding of what the columns

13   are. Okay? So let's start on the far left,

14   GEOID10. What is that column?

15   A. That is a unique identifier of a census

16   block. And it is the identifier that census block

17   followed to the right by data -- it's labeled

18   GEOID10, which means it is the geographic

19   identifier of that block as of the 2010 census.

20   Q. Okay. And the next column is PL_Total18.

21   What is that column?

22   A. That is a shorthand for the Census

1   Bureau's PL94-171 count, full count, complete

2   count, on the decennial census of the total

3   population ages 18 and older in that particular

4   census block. So it's a full count -- a full

5   enumeration on the census of that particular

6   census block.

7   Q. And it's only persons 18 and older in that

8   column?

9   A. Correct.

10   Q. Okay. And the next column is the 94-171

11   data of the total population 18 and over that's

12   white non-Hispanic?

13   A. That's correct.

14   Q. And the next column is all three. What

15   does that reference?

16   A. That references the tripartite minority as

17   Mr. Fairfax defined it.

18   Q. And the tripartite minority is blacks,

19   Hispanics, and Asians, correct?

20   A. Correct.

21   Q. Sometimes we use the term BH&A for that,

22   correct?

1   A. All right. BH&A.

2   Q. Okay. The next column is, as I understand

3 it, all three, the BH&A percentage of that group

4 within the district; is that correct?

5   A. I believe that's the percentage of the PL

6 Total 18. In other words, the concept here is the

7 all three minority group, the BHA group, as

8 Fairfax defines it, that group as a percentage of

9 all voting age persons on the 2010 census.

10   Q. Okay. And just to stay with that column

11 for a minute, we have a number down there of 71

12 percent. I take it the 71 percent is 262 on the

13 far -- first column where we have population

14 figures 262. And 186 is all three. So the

15 proportion of 262 that's 186 is 71 percent,

16 correct?

17   A. Correct. 72 percent.

18   I'm sorry. 71 percent. You're correct.

19 Yeah. I just verified that. That's the

20 calculation of the 186 divided by the 262.

21   Q. Then we have the next column which is

22 GEOID_1. And it has the same numbers as the

1   GEOID10 on the far left. So what is that?

2   A. That, again, is confirming that the unique

3   identifier of that census block, which is the same

4   on the American Community Survey in the five-year

5   2017 file -- it's like your passport or your

6   unique driver's license or Social Security

7   number -- it's the same piece of geography, the

8   same GEOID. And now we're saying here we're

9   looking in columns to the right, the CVAP total.

10   So we're talking about, as I recall, the 2017

11   five-year CVAP file -- five-year American

12   Community Survey file. And it is showing the

13   estimates of the citizen voting age population

14   from the American Community Survey from that

15   five-year file.

16   Q. And it is showing it for each census

17   block? Is that what you're reporting in the

18   remaining columns?

19   A. Correct. For each of the unique census

20   blocks, confirming with the GEOIDs in two columns

21   that it is, in fact, the same census block, I

22   wanted to be sure that the data are lined up

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1   properly. This is part of a very, very big

2   spreadsheet that has got hundreds or thousands of

3   blocks, so we're looking at only a few of them

4   here.

5   But it says, yes, we've matched that block

6   in 2010 and we've matched it in the 2017 ACS file.

7   Each block has the same Social Security number, as

8   it were. So we're talking about the same piece of

9   geography. And, now, here is what the ACS says

10   about that block.

11   Q. Okay. And you're correct -- and I should

12   have made this clear when I handed you this

13   exhibit -- this is merely an excerpt of a big data

14   sheet that was provided. And the reason I -- we

15   only excerpted a small amount was I thought it

16   would be a little easier for two old people to

17   look at.

18   A. You made it a lot easier for me,

19   definitely.

20   Q. And I share with you the age issue.

21   A. And I am an old person, too.

22   Q. We can stipulate both of us are the too

1 oldest people in the room.

2   A. I agree. Correct.

3   Q. So let's look at the next column here,

4 CVAP Total. It says 227. And I just want to make

5 sure I understand. So within that census block,

6 according to the 2013 to 2017 ACS file, it reports

7 that of the 262 people who were 18 and over as of

8 2010, that today that census block has 227 people

9 who are citizens?

10   MR. HARRIS: Objection.

11   Q. The estimate? I'm sorry. I didn't quite

12 finish.

13   That's estimating 227 people living in

14 that census block are citizens?

15   MR. HARRIS: You added the word estimate,

16 so I don't have an objection.

17   A. So it estimates the total citizen voting

18 age population at 227, yes.

19   Q. And that figure, of course, is a figure

20 based on data, an estimate from 2013 to 2017,

21 correct?

22   A. Correct.

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1   Q. And it really -- it's far different than

2   the number of people who are listed in that

3   particular block back in 2010 when the census was

4   taken, correct?

5   A. Correct.

6   Q. Okay.

7   A. But you understand that the citizen voting

8   age population is a subset of the voting age

9   population. So the 227 is the estimate of the

10   total 18 and older who are citizens, as opposed to

11   the 262 which is the total 18 and older both

12   citizens and non-citizens.

13   Q. The 262 number, that was taken from the

14   2010 census?

15   A. Correct. And that is everybody 18 and

16   older irrespective of their citizenship.

17   Q. And within that block from 2010 to 2017

18   people move in, people move out, people die,

19   people are born, correct?

20   A. Correct.

21   Q. All right. And so the 227 figure, I guess

22   is what I'm driving at, for CVAP total that you

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1   have, we don't really know how many people are in

2   that particular block of 18 and over as of 2017,

3   do we?

4   A. All we know is that it must be at least

5   227 and it can only be larger.

6   Q. Right.

7   But we don't really know what the number

8   is, correct?

9   A. No.

10   Q. Okay. All right. I just want to make

11   sure I understand this as we go forward.

12   So that first total is the ACS file

13   estimate of citizen voting age population total

14   within that particular block, correct?

15   A. Correct.

16   Q. All right. The next one is the citizen

17   voting age population -- the next column, citizen

18   voting age population white non-Hispanic as of the

19   2013-2017 ACS file estimates, correct?

20   A. Correct.

21   Q. The next column is the black non-Hispanic

22   CVAP number, correct?

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1   A. Correct.

2   Q. And, then, the next column is the Asian

3   CVAP number, correct?

4   A. Correct.

5   Q. Now, what is the next column?

6   A. The next column is CVAP_ONH, other

7   non-Hispanic. So these could be -- for example,

8   this would encompass Native Americans. It would

9   encompass -- I'm not sure exactly what the term is

10   for Alaskan --

11   Q. Aleutian Islanders?

12   A. It's not Aleutian Islanders. But it's the

13   Native Alaskan population. It's a collection of

14   other groups that are not contained within the

15   categories to the left. It's all other responses

16   of those who are non-Hispanic.

17   Q. Would that include people who reported

18   black and white?

19   A. It may well. I'd have to check. It

20   could -- it very likely includes other -- it

21   includes multiracial.

22   Q. Okay. It includes multiracial, and it

1   would, therefore, not include anyone who listed

2   themselves as just Hispanic; is that accurate?

3   A. Well, you can list yourself as Hispanic,

4   and then you have to answer a separate racial

5   question. So just because you're Hispanic, you're

6   of some other race the way the Census Bureau views

7   it. Most Hispanics check the box that says my

8   race is white. So you can be Hispanic and white.

9   You can be Hispanic and some other race: black,

10   Asian, whatever.

11   Q. And if a person had checked off the box

12   Hispanic and white, would they be in this category

13   of CVAP_ONH?

14   MR. HARRIS: Objection to foundation.

15   A. No, they wouldn't because they had checked

16   the box Hispanic, and this says other

17   non-Hispanic.

18   Q. Okay. So they would be excluded from that

19   column?

20   A. They would not be -- they would not be

21   accounted for under that column, correct.

22   Q. Okay. The next column is CVAP Hispanic,

```
 1   correct?

 2        A. Correct.

 3        Q. And these are people who identified as

 4   Hispanic in the survey?

 5        A. These are people who checked the box

 6   saying I am Hispanic and will also have answered

 7   another question about, well, you're Hispanic and

 8   tell me what your race is.  They could be white,

 9   black, you know, Asian, any -- or other Hispanic.

10        Q. Okay.  And then we have all three, which,

11   again, is BH&A, correct?

12        A. That's my understanding, yeah.

13        Q. And how come there's fractions there,

14   149.2 persons and 137.1?

15        A. The fractions are shown to indicate that

16   these are estimates down to fractions of people

17   based on the iterative proportional fit technique,

18   which is also known in the Census Bureau's

19   terminology as raking, which conveys a little more

20   conceptually what happens.

21            Raking involves smoothing out the data so

22   that they are not internally inconsistent.  So to
```

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1   make the data perfectly internally consistent you

2   would say the all three CVAP -- well, actually

3   each of the columns, if I had shown the decimal

4   point, could well show some decimal, you know.

5   Instead of eight people, it might be 8.2 people or

6   8.2.9, you know, very small fraction. And this is

7   all a function of the raking process which makes

8   the data internally consistent.

9   So when you add up the parts of a census

10   block group to create a whole, whether it's a

11   single column or a single, you know -- any of the

12   single columns, they will all add up to consistent

13   totals that will not exceed or fall short of the

14   logical total that the American Community Survey

15   has published.

16   So the all three CVAP of 149.2, which

17   rounds to 149, will be consistent, based upon the

18   method used here, with what is shown for those

19   three groups if you added them up at the block

20   group level.

21   Q. How does -- how do you conduct raking?

22   A. It's, basically, impossible to describe in

1   words, other than to say the term iterative

2   proportional fit -- and let me use an analogy.

3   I'm sorry to have to do it this way, but it's the

4   only way I can explain it.

5   Q. It may be the only way I can understand

6   it.

7   A. You go into a tailor and you say, I want

8   to buy a suit. And the tailor says, I measured

9   you and you wear a size 40. So he takes a 40 off

10 the rack. You put it on, and you say, fits fine

11 here (indicating), it's a little tight on the

12 waist, and it's a little long for my height. And

13 the tailor says, well, I'm going to mark it with

14 chalk in about eight different places and we're

15 going to do a fit. And he's going to take it in a

16 little here, let it out a little there.

17   And you come back. Put it on. Puts it on

18 you. And he says, that first iteration looks

19 right, but now I see that the changes I made have

20 caused it to be a little out of kilter right on

21 the shoulder. So he says, I'm going to do another

22 iteration. I'm going to do something to the

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1   shoulder on the left or the right.

2   And you come back a week later, and he

3   says, I noticed that you seem to be hunched over.

4   You're the kind of person whose shoulder is above

5   on the right side. So we've got to do another

6   iteration. We're going to do it -- take it in

7   here.

8   You come back a week later and put it on,

9   and he says, it's a perfect fit. You put it on,

10   and nothing is out of kilter anywhere.

11   Q. Okay.

12   A. That, by analogy, is what you do with the

13   rows and columns of data at the block level, so

14   that you'd say for all the data you have at the

15   block level you can add it up from top to bottom

16   or left to right and you won't ever come up with

17   something that's a logically impossible, you know,

18   thing, which is exemplified here in this case

19   with -- for example, it's logically impossible

20   that you would have a voting age -- looking at the

21   bottom row -- one, two, three, four -- I'm sorry.

22   The first column, the bottom row of this

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```
1    exhibit, the first column, the PL Total 18, that

2    says there are 351 persons 18 and older.  And,

3    yet, if you go over -- one, two, three, four --

4    five columns to the CVAP total, you say, well,

5    your data are telling me that in this block with

6    351 people 18 and older there are 430 people 18

7    and older who are citizens.  That's a logical

8    impossibility.  Now, there are reasons that this

9    can happen.

10        Q. What are they?

11        A. One reason is that the method of

12   allocation and disaggregation and reaggregation

13   has introduced errors.  Another possibility is

14   that the 351 is a picture of a piece of geography

15   as it was in 2010 and the CVAP total 430 is a more

16   current estimate of the people that are there in

17   subsequent years.

18        Now, this explanation of the piece of

19   geography that we know historically in 2010 is now

20   inhabited by a larger population subsequently.

21   It's perfectly understandable.  And I don't

22   quarrel with that.  What the 430 suggests is that
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 1   you maybe don't want to look back at that 351 and

 2   say, well, that's a good guide for me to use for

 3   what's going on today.

 4         So you've got a problem in terms of using

 5   the -- in that particular block saying if I was

 6   trying to figure out how to allocate block group

 7   data using the -- today's ACS based on the

 8   snapshot that we have back in 2010, I'm getting --

 9   I'm getting a distorted picture from history.

10   History is not telling me what the world is like

11   today.  And it's not anybody's fault, but it's

12   simply a recognition that this is going to erode

13   the quality of the data that I have if I have to

14   disaggregate and reaggregate.

15         So I have to be very careful because based

16   on that historically different world that I'm

17   using I'm getting a flawed basis for allocating

18   today's data, and it's going to lead me to use my

19   method to allocate people that's going to give me

20   strange, logically impossible numbers such as we

21   have here.

22         So the answer is, well, you put the suit
```

1　on but you didn't fit it. You didn't go through

2　that iterative proportional fit. You didn't say,

3　you know, it's too tight here and it's too loose

4　here. This is not going to make you look like you

5　really are. We need to do some chalking and

6　taking in. And, then, after I do it, I see I made

7　another mistake. And I need to get rid of that

8　mistake. And, then, I need to have another

9　iteration to get it so it's perfect.

10　　　　　The final iterative proportional fit gives

11　me a dataset in which I have resolved all of these

12　inconsistencies and I have you in a suit that

13　makes you look exactly like you are, there is

14　nothing inconsistent about that. That's the best

15　way I can explain it in plain English.

16　　　Q. This number of 262 and 351 in Exhibit 1,

17　is that used at all in your calculation of what

18　the CVAP numbers are in the block in this case?

19　　　A. Yes.

20　　　Q. How so?

21　　　A. That's -- that's the -- contrary to what

22　Mr. Fairfax has somewhere where he says it appears

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1   that Morrison didn't use the population 18 and

2   over; he used the total population, that's

3   incorrect. He had that impression, but he's

4   wrong. Iterative proportional fitting uses the 18

5   and over population as best as we can determine

6   it. And that's from a decennial census that

7   counts everybody. And it's just how we use that.

8   That's the suit that we start with. We say that's

9   the right suit, it's the size 40, not 42 or 38.

10   We start with that. We say that's the best suit

11   we've got that comes close -- that best

12   approximates your body, now put it on and we've

13   got to resolve the places where it doesn't fit

14   right.

15   Q. Well, when I look at the column in the far

16   right, all three percentages, I see 66 percent in

17   the one I'm looking at, the fourth one down.

18   A. Yeah.

19   Q. And all three, BHA, CVAP is 149.2. I take

20   it -- am I correct that the 149 is actually 66

21   percent of 227, not 262?

22   A. Yeah. I believe you're correct. Let me

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1   just double-check to make sure that's right. It

2   should work out that way.

3   Yeah. That gives me 65.6 percent, which

4   rounds up to 66. Yeah. That's how that

5   calculation is made.

6   Q. And it's fairly standard, I guess, to

7   round up in some cases when it's over .5 and okay

8   to round down when it's under .5?

9   A. There is no real standard that applies.

10   It just -- if you want to know what the percentage

11   is just so you can say, well, just give it to me

12   in whole numbers, it's all three -- it means that

13   it's -- you know, 66 percent is definitely in this

14   case the -- in this case, being the block group

15   GEOID that ends 4016, which is the fourth from the

16   top --

17   Q. Uh-huh.

18   A. -- in that case you've got 227 citizen

19   voting age persons. And the all three percent

20   says that two-thirds of them, 66 percent, are

21   members of one or another of those three

22   minorities. So that's definitely a majority

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1   minority census block according to the

2   calculations that I would make for that census

3   block.

4   And there is nothing inconsistent about it

5   in the sense that that is a block that's a

6   majority citizen voting age population -- I should

7   say the three -- the BHA combined minority

8   constitutes 66 percent of those 227 CVAP. And the

9   227 CVAP, as one would expect, do not exceed the

10   262 total persons 18 and over back in 2010.

11   So this is the census block where we seem

12   to have gotten it right. And it doesn't look like

13   it's changed a whole lot historically so our

14   numbers are thrown off. So that's a census block

15   without a problem.

16   Q. I take it that it's acceptable that you're

17   trying to get percentages to round up or round

18   down? It's acceptable, correct?

19   A. It depends what you're using them for.

20   Anything is acceptable for the purpose at hand.

21   Q. Have you ever rounded up?

22   A. Well, rounding up or down is a function of

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```
1    how many decimal places you show.  I, myself, am

2    not doing the rounding.  I'm simply displaying the

3    data according to some degree of precision.  It's

4    not -- it's not a decision to round up or down.

5    It's a decision to give a number that is sensible

6    for the purposes at hand.

7         Q. I thought you said earlier that the 66

8    percent was actually a figure that you rounded

9    down from 66.4 or something like that?

10        A. In this case I think it may have been

11   rounding up from 65.6.

12        Q. Thank you.

13           So you did that in here, in this

14   calculation?

15        A. Well, that's the way it's shown here.  It

16   could have been presented to another decimal

17   point.

18        Q. But in your database it rounded up?

19        A. Well, in the database itself the 66

20   percent shown in the printout is actually stored

21   and manipulated and calculated in the database

22   itself to about eight places of precision, far
```

1   more than is necessary. So 66 is not what's in

2   the database. 66 is what I have chosen to display

3   so it fits on the table. But in the computer it's

4   actually 65.63876. That's the number that's being

5   calculated.

6   Q. So by limiting it to two decimal points

7   you ended up rounding it up to 66?

8   A. For display purposes, yeah.

9   Q. Okay. For a district that's composed of

10   both individual blocks -- and I'm talking about

11   the demonstrative illustrative. So for a district

12   that's composed of individual blocks and whole

13   block groups, isn't standard demographic practice

14   favoring allocating the total CVAP of a parent

15   block group to those individual blocks within the

16   district based on the voting age population

17   counted in each block?

18   A. Yes.

19   Q. Okay. Did you do that in this case?

20   A. Yes.

21   Q. All right.

22   A. And where Mr. Fairfax and I differ is how

1   we allocated.

2   Q. And tell me how you -- the different

3   allocation that took place, if you can.

4   A. I used iterative proportional fitting,

5   which is, in today's world, the preferred method.

6   And Mr. Fairfax used a method that has been in use

7   in the past and would in today's -- according to

8   today's standard practices call for some

9   evaluation of a quality of the data that resulted

10   from the method that he used, which is --

11   Q. I'm sorry. Go ahead. I thought you were

12   finished.

13   A. Well, his method is the method that the

14   GIS program he used applies when he pushes the

15   button that says you allocate this to the block

16   level and give me a block level file which I can

17   then add up as I see fit. So that method is -- I

18   would, you know, characterize it simply as it's

19   yesterday's way of doing things.

20   And based on what we know today, I think I

21   made the statement that there are a lot of ways

22   you can do this and not all of them work all the

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1   time, something to that effect. So there is an

2   additional step that's kind of called for when you

3   use yesterday's method, which is after you've used

4   the method you want to look at the data that have

5   resulted to validate the quality of the data and

6   make sure that they haven't -- you haven't

7   inadvertently obtained blocks in which you have

8   logically impossible relationships that could have

9   been avoided using the IPF method.

10   Q. Is the method that he used the Maptitude

11   method?

12   A. That's my understanding. That's what he

13   said he used.

14   Q. So you take issue with the Maptitude

15   method as being old school?

16   MR. HARRIS: Objection to form.

17   You can answer.

18   A. I wouldn't say it's old school. I would

19   say it's a method that meets a broad spectrum of

20   needs in redistricting. If you're

21   gerrymandering -- political gerrymandering, you

22   don't need to be concerned about inconsistencies

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 1   in the data; you just want to skew it toward your

 2   preferred candidate link.

 3          In cases where one is putting together

 4   data for meeting -- for the purpose of meeting a

 5   legal standard, and an expert such as myself is

 6   asked to testify as to whether the data have

 7   satisfied that standard, in my field the standard

 8   is to evaluate the data, the quality of the data,

 9   and then proceed to analyze the data as a basis

10   for forming an opinion based upon the conclusion

11   that the quality of the data support drawing

12   conclusions; in other words, the data are not

13   flawed by inconsistencies that may lead you to the

14   wrong conclusion without your knowing it.

15      Q. Maptitude's been around for, roughly, 20

16   years, correct?

17      A. It's been around for a long time, and it

18   has a broad base of users.

19      Q. And you, in fact, have used it yourself,

20   correct?

21      A. I'm sure that it's been used by my GIS

22   person for allocating pieces of territory.  But
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 1    the data that we use is always -- if it's at the

 2    block level, is always allocated to the block

 3    level from the block group level using iterative

 4    proportional fit.

 5         So the data that I use in -- for my

 6    purposes are not data that have ever been derived

 7    by, as I said, figuratively speaking, pushing the

 8    button on Maptitude to allocate it using

 9    Maptitude's method.  I prefer not to use that

10    method.

11       Q. So you have never used Maptitude to

12    generate citizen voting age population figures in

13    any case you've ever worked on?

14       A. That --

15         MR. HARRIS:  Objection to form.

16       A. That would be true -- going back in

17    history, it's very possible that I've done that in

18    cases prior to, perhaps, 2009 or '10 or '11 before

19    I adopted this approach.

20       Q. And the approach that you mentioned, the

21    IPF -- is that what it's sometimes referred to?

22       A. Yeah.
```

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 1        Q. That approach was originally formulated by

 2   you or by someone else?

 3        A. It has a long history, going back to the

 4   1930s, within the -- among statisticians.  The

 5   problem came to my attention, as I recall, in the

 6   Yakima case back in the -- in or around 2012 or

 7   '13 when I discovered that disaggregating ACS data

 8   to the block level and then reaggregating it was

 9   leading the expert on the opposing side to me to

10   some very strange conclusions.  And it was at that

11   point that I adopted the more sophisticated

12   approach of IPF in order to avoid those kinds of

13   problems because I saw that that was a problem

14   that could arise if I simply used Maptitude's

15   method.

16        Q. Who came up with the original theory for

17   IPF?  What methodology?

18        A. I'd have to refer to my forthcoming book

19   in which I've got some footnotes which explain

20   where it comes from, but it comes from published

21   articles that go back to, I think, the 1940s,

22   quite possibly, a long time ago.
```

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1   It's a method -- the idea was proposed a

2   long time ago. And it has been implemented in a

3   number of different areas outside of the

4   restricting area or outside of the use of census

5   data. And it has come into use more recently;

6   that is to say, in the last five or 10 years,

7   among some demographers such as myself.

8   Q. Okay. Who else, besides you as a

9   demographer, has used IPF?

10   A. Well, the Census Bureau has adopted it as

11   a standard -- the Census Bureau's method of raking

12   is an application of IPF, and they have been using

13   it as their, sort of, best practices method for a

14   lot of the internal work they do where they have

15   to deal with the problem that data at one level of

16   geography don't add up to data at another level

17   they're publishing.

18   It's as though you said I have a county

19   that has all these different pieces of geography

20   and here is my estimate of how many people there

21   are in these different places, but when you add

22   them all up they don't equal what I tell you is my

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1   estimate of what the county's population is.

2   We can't tolerate that at the Census

3   Bureau. The parts have to add up to the whole.

4   And the wholes have to add up to the super wholes,

5   if you see what I mean. So they've adopted that

6   as their best practices. And I took my cue from

7   that. Simply if it's what the Census Bureau does

8   to handle this problem, then I want to use that

9   method, too. And it -- if you don't use it, you

10   run the risk of having a dataset that has internal

11   inconsistencies.

12   Q. Okay. The IPF methodology, though, it can

13   be applied in different ways, correct?

14   A. Well, that's true in the way you've stated

15   it, yes.

16   Q. So just to use your tailor example and the

17   jacket earlier, there are some tailors who may

18   take in four or five different iterations, and

19   there are some who might take in five or four or

20   three, correct?

21   A. Correct. And the only significant point

22   here is do they finally reach the same outcome,

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1   which is a perfect fit. The perfect fit is the

2   ultimate criterion. How they got there doesn't

3   matter as long as they do get there.

4   Q. What does error mean in the term margin of

5   error? What is the error that we're looking at in

6   margin of error calculations? Do you know?

7   A. The use of the term error there is not the

8   colloquial meaning of, oh, you made a mistake. It

9   is defining a range of uncertainty.

10   And, again, I'll use the analogy of when

11 you hear about the political polsters who say

12 we've taken the temperature of the electorate and

13 48 percent of the electorate says that they're

14 going to vote for candidate X, the margin of error

15 is three points. So that means, based on the

16 numbers we have, the true percentage, the true

17 underlying percentage could be as much as three

18 points higher or three points lower to a -- and

19 the implication is some acceptable scientific

20 level of certainty which usually is about 90

21 percent or 95 percent.

22   Q. I asked you earlier about your analysis

```
 1   that you conducted to reach the 49.9 percent.  I

 2   asked you about confidence intervals there.  I

 3   didn't see any margin of errors listed in your

 4   analysis.

 5       A.  Correct.  And as I answered before, it's

 6   because it's unnecessary.

 7       Q.  Okay.

 8       A.  I don't require that because the number is

 9   already below 50 percent, which means it's

10   likelier than not to be short of a 50 percent

11   majority.

12       Q.  But being 50.03 is not you have to run

13   MOEs?  Is that your position?

14       A.  I can tell with a razor-thin majority that

15   having worked with the American Community Survey

16   data, that without even calculating the margin of

17   error in that case I can say with a very high

18   level of confidence that it does not meet the

19   Gingles -- the first Gingles prong to a scientific

20   level of certainty of at least 90 percent.

21       Q.  But it's a coin flip; is that correct?

22       A.  It's much more like a coin flip.
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1   Q. On paragraph 24 you say, Mr. Fairfax has

2   disregarded the insurmountable barrier presented

3   by his razor-thin majority point estimates (50.03

4   percent and 50.04 percent), correct? Did I read

5   that right?

6   A. Correct.

7   Q. When you say insurmountable barrier, are

8   you saying that it's impossible to create a

9   district -- one district in which blacks,

10   Hispanics, and Asians constitute a majority of the

11   citizen voting age population?

12   MR. HARRIS: Objection to foundation and

13   form of that question.

14   You can answer.

15   A. What I'm saying is that in my evaluation

16   of Mr. Fairfax's first report, and limiting my

17   opinions to that first report, which is all that I

18   had done at the time, if all he could put forward

19   were the districts he'd presented at that time, I

20   saw the problem as an insurmountable barrier

21   because even if I accepted his 50.03 and 50.04 or

22   acknowledged that we both came to numbers that

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1   were very, very close -- and I would personally

2   favor my 49.99 simply because I'd say at least I

3   know I've got a -- I've done it myself, that

4   however one looks at it, based on what he

5   presented in his first report, he cannot make the

6   case based on the data in that first report to

7   have satisfied Gingles 1.

8   And I was referring to the insurmountable

9   barrier there of even if he presented the margins

10   of error, which remain to be presented, I already

11   know what they will show, which is that there is

12   no way that 50.04 can be regarded as a majority

13   with a degree of scientific certainty that I would

14   apply, which is 90 percent sure or more. I would

15   concede only that it says it is slightly likelier

16   than not that the data would allow you to claim it

17   is a majority, a bare majority, slightly likelier

18   than that, maybe 55 percent confidence or 51

19   percent confidence but not anywhere near 90

20   percent. I know that just from my experience.

21   Q. In the next sentence of paragraph 24 you

22   say, The MOEs here undermine his ability to make a

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1   claim about the minority population with any

2   reasonable scientific certainty.

3   Did I read that correctly?

4   A. Correct.

5   Q. So where are the MOEs that you're

6   referencing that are here?

7   A. I am -- I have not calculated the MOEs,

8   but I know that they will be far larger than the

9   .04 that is above 50 percent. What I'm saying is

10   I can make an informed judgment call here without

11   calculating the MOEs. And I'm saying -- in that

12   sentence what I'm saying is the MOEs here, had I

13   calculated them or were I to calculate them, based

14   on my experience I know that they would undermine

15   his ability to make the claim just based on my

16   experience. The MOEs will be far larger here than

17   four-one-hundredths of a percentage point.

18   Q. And you -- just for the record, you did

19   not calculate any MOEs with regard to the data in

20   this case?

21   A. I did not calculate them, but I have seen

22   them calculated for districts that have been

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1   formed with 10 times as many blocks. And I recall

2   that the margins of error in those cases were

3   about a half a percentage point. So I know from

4   that experience that they -- the margins of error

5   here would be in excess of a half a percentage

6   point, which is far more than four-hundredths of a

7   percentage point.

8   Q. Right. And what I'm asking -- again, my

9   question was in this case you have not calculated

10   MOEs, margin of errors, for any of the data that

11   you collected?

12   A. That is correct. I view that as Mr. -- I

13   view that as Mr. Fairfax's obligation to do so if

14   he is asserting that his data satisfied Gingles --

15   show that's it's possible to satisfy Gingles 1.

16   That's not my obligation. That's his obligation.

17   Q. So one of the things that I want to

18   understand is -- and I didn't see it in your

19   report -- I do see it in the table you came up

20   with, in Table 3 on page 7 -- as to how you got --

21   what results you got. You've got the 49.9 and the

22   49.96 looking in Fairfax Districts 1 and 2,

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1    correct?

2        A. Correct.

3        Q. What I don't understand, and I don't see

4    it in here, and I know that you've used iterative

5    proportional fitting, IPF for short, but I don't

6    really see anywhere in the report how you actually

7    applied IPF to the data.  Is it in there?  Did I

8    miss it?

9        A. No.  It's not -- well, it's in there in

10   the sense that one of the documents I believe

11   would have been turned over would have been the

12   block level file.  Actually, it -- what I turned

13   over, which would be the raw material that would

14   indicate how I put the data together using IPF,

15   that file would be the file from which you have

16   extracted Exhibit 1.

17        That file shows the -- taking Exhibit 1,

18   that file shows -- taking Exhibit 1, if you look

19   at the right-hand half of it where we have the

20   GEOID1 column and everything to the right of it

21   showing the CVAP total, et cetera, those -- the

22   Excel spreadsheet from which you extracted that
```

1   printout is the way I did it. And so if you took

2   the thousands of rows of data that are in that and

3   looked at that, I would say, yes, I've given you

4   my database as I've put it together using IPF.

5   Q. Well, tell me how -- let me ask -- I'll

6   just ask the questions and maybe we'll get there a

7   little faster.

8   Essentially you took the 94 -- PL94-171

9   data from the census, and you put it in -- either

10   you put it in an Excel sheet or someone at the

11   Census Bureau has an Excel sheet, but, whatever,

12   it's already there in an Excel spreadsheet to show

13   the various VAP totals, correct?

14   A. Correct.

15   Q. Then you took the ACS survey data and you

16   pulled out of that for each block the citizen

17   voting age population numbers, correct?

18   A. No. What I -- the -- the right-hand

19   portion of Exhibit 1 shows the block level

20   disaggregation that resulted from the IPF.

21   Q. That's what I'm asking. How did -- I

22   didn't see anywhere how you got these numbers to

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```
 1   the right of the --
 2        A. Okay.
 3        Q. -- GEOID1 column.
 4        A. Okay.  My answer -- and that's a fair
 5   question.  My answer is that the iterative
 6   proportional fit, the IPF method, applied to the
 7   block group data yielded the block level data
 8   shown in Exhibit 1.  Now, when you say how did you
 9   do it, all I can explain is it's a very
10   complicated procedure, statistical procedure.  And
11   by analogy, it was what the tailor did to the suit
12   by coming back to it again and again and again.
13   So that every time the allocation was made and
14   there was an inconsistency, the inconsistencies
15   were resolved internally so that they were no
16   longer there.  And that was a successive iterative
17   process of fitting the data at the block level to
18   all of the block group totals.
19             And I can't -- the only way I could
20   explain how it's done would be to refer you to the
21   Census Bureau's raking procedure.  And there is
22   probably, buried in the Census Bureau website
```

1 somewhere, some kind of a technical document that

2 says raking, this is how we do it. And, then,

3 they may or may not use the term IPF. But what

4 they do is a form of IPF.

5   Now, the method of doing it is like asking

6 the tailor to tell you how he adjusts the suit.

7 You know, there isn't -- you go through and see

8 where it doesn't fit, and then you adjust it so it

9 does. And, then, you see where it's thrown other

10 things off. And, then, you readjust that. And

11 you keep iterating it until the misfits have

12 disappeared.

13   Q. Well, what I guess I'm looking for in your

14 report is an explanation of how you corrected

15 along the way the various iterations. You found

16 that something didn't work. You had to make a

17 change. You -- and you kept going along. So

18 where is the explanation in your report for all of

19 that, what you call allocation method and

20 resolving inconsistencies?

21   A. I did not -- there is nothing in my report

22 that explains the details of how IPF works. I

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1   simply used the term. And I would say for someone

2   who wants to have an answer to your question,

3   which is a perfectly reasonable one, I would have

4   to refer you to the literature on iterative

5   proportional fitting that is footnoted in my

6   forthcoming book.

7   Q. Okay.

8   A. I can give you the citation if you want.

9   Q. I actually think we have it already in

10   your CV. The book title --

11   A. Yeah. You have the reference to the book,

12   but you don't have access to the galley proofs --

13   Q. Okay.

14   A. -- or the footnotes. I can furnish the

15   footnotes to the references if you want. There is

16   a lot of literature among statisticians.

17   Q. What I would like from you today is for

18   you, in your best ability, to explain to me how

19   you applied IPF to the data in this case to reach

20   the results that are produced in Table 3 of your

21   report.

22   MR. HARRIS: Object to the form of the

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1   question.

2   You can answer.

3   A. I'll try to answer it as best I can

4   building off of the three terms, iterative

5   proportional fitting.

6   Iterative, of course, means doing it over

7   and over and over until you've resolved the

8   problem and it's gone away, by analogy with the

9   tailor.

10   Proportional means that you have adjusted

11   things proportionally so if something that should

12   add up to 100 percent adds up to 101 percent you

13   adjust it so that the parts add up to the total

14   such that they equal 100 percent rather than

15   exceed 100 percent or fall short of it.

16   Fitting is to say when you've done that

17   row-by-row basis with the data and you try to add

18   up different columns and you find inconsistencies,

19   then, by analogy, you're going back to the suit

20   and you're pulling in a little bit here or letting

21   out a little bit there so that it fits without

22   destroying the fit that you have in the other

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1   dimension.

2   Now, that's an abstract statement. But

3   the term fit, as I've used it here, actually has a

4   very specific meaning among statisticians. It's

5   like the term error. You know, it's not what you

6   think it means. It has a very specific meaning.

7   And when a statistician says we fit the data to

8   something, that has a very specific meaning to

9   statisticians. And I can't offer you a

10   definition. I'd have to look it up.

11   Q. There are various ways to fit the data,

12   though, correct?

13   A. There are various ways to fit the data.

14   And statisticians may, as I have said, say there

15   are a number of ways you can fit the data. And

16   some of them can be problematic, others not. But

17   after you fit the data, you always want to

18   evaluate the quality of the data that you

19   result -- that you have created. And, again,

20   that's saying, well, now that I fit the data, does

21   everything add up the way it should be or are the

22   discrepancies so small that they don't matter?

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1   Q. In this particular case, in preparing your

2   report for Virginia Beach, did you rely upon the

3   work of anyone else to do any calculations for you

4   of data?

5   A. I relied on a colleague with whom I work

6   regularly, my coauthor Thomas Bryan, who is a data

7   scientist and to whom -- with whom I have worked

8   for at least the past decade to carry out certain

9   calculations, in particular iterative proportional

10   fitting.

11   Q. So he actually -- is he a statistician?

12   A. He is a data scientist and a statistician,

13   yes.

14   Q. I take it -- I'm not trying to be

15   pejorative here. I take it that in order to do

16   the actual three stages of IPF that you mentioned

17   earlier that you really need to be a statistician?

18   A. I wouldn't dispute that statement.

19   Q. So you probably couldn't do it because

20   you're not a statistician, correct?

21   A. I think I could if I spent enough time

22   learning how to, but it would take me a long time.

1   And I have a higher degree of confidence in a

2   person who has done it for a long time and, in

3   fact, who started his career, as Mr. Bryan did, at

4   the Census Bureau where he did that precise thing

5   using the Census Bureau's preferred method which

6   is called raking. So he is the person who's done

7   it at the Census Bureau. He knows how to do it.

8   And I have confidence in delegating that task to

9   him.

10   Q. And it's kind of -- listening to your

11 answer, it reminds me a little bit of our GIS

12 conversation we had a little while ago where you

13 don't really know how to run the GIS software but

14 you can tell someone who's run it I want the line

15 moved there and I want the line moved there and

16 you know what GIS capabilities are?

17   A. Correct.

18   Q. And here you know what IPF is, but you

19 can't run it yourself but you know people who know

20 how to run it and you rely on them? Am I stating

21 that correctly?

22   A. That's correct. And I know how to

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1   evaluate the result of what they've done by saying

2   when I add the numbers up whichever which way I

3   don't see internal inconsistencies as I do in

4   Mr. Fairfax's data.

5   Q. Have you worked before -- I think you said

6   you have -- with Mr. Bryant before?

7   A. Mr. Bryan, B-R-Y-A-N.

8   Q. Bryan. I'm sorry.

9   A. Yes, I have. I've worked with him for

10   probably a decade at least.

11   Q. How did you communicate with him?

12   A. Primarily by phone and email.

13   Q. All right.

14   A. I'd say almost exclusively by phone and

15   email.

16   Q. Okay. And after you received the Fairfax

17   report and the large amount of documents and files

18   and everything, that's when you reached out to Mr.

19   Bryan for his assistance with respect to doing the

20   aggregation and disaggregation?

21   A. I don't remember exactly what the sequence

22   is. I know that I recognized early on -- it may

```
 1    well have been before I received Mr. Fairfax's

 2    initial report -- that it was going to be

 3    necessary for me to have a data file that was

 4    properly structured in order to be prepared to

 5    evaluate plans he might put forward.

 6        Q. I see.

 7        A. And I don't recall what the sequence there

 8    was, but I know that this involved, basically,

 9    requesting that Mr. Bryan download the ACS data

10    for the entire city at the block group level and

11    be prepared to do further steps with it.  So I

12    know that I told him to get ready to do an IPF

13    with the data that we think we'll need.

14        Q. At any point in your phone conversations

15    or emails with Mr. Bryan did you give him any

16    instructions whatsoever?

17        A. The only instruction I gave him was I said

18    we are starting out on this case and it looks like

19    we're going to need to do this very, very lengthy

20    process of preparing a block level file of data

21    that are totally internally consistent.

22            And this is something that I know that he
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 1   spends the better part of a day doing because

 2   it's, like, spend a whole day with a tailor

 3   getting it right.  And I know that I asked him to

 4   be prepared to do that because that was a

 5   time-consuming thing.  He had a day job.  And I

 6   said, you do it on weekends, try to get this out

 7   of the way.  Then what I'll want to see is a -- as

 8   a starting point is a census block level file,

 9   such as the one that you've shown in Exhibit 1,

10   where I can look at the result of your iterative

11   proportional fit and, you know, assure that

12   everything is right.

13        And I did the same thing looking at

14   Mr. Fairfax -- the corresponding block level file

15   for Mr. Fairfax and say, well, I look at his file

16   and everything isn't right.

17      Q. I take it that since you can't or didn't

18   in this case perform IPF yourself, there was no

19   way for you to take Mr. Bryan's analysis and

20   verify its accuracy?  Is that true?

21      A. No.  That's not true at all.  It's

22   possible for me to verify it.  And I do verify it
```

1   by checking to make sure that there are no

2   inconsistencies. In other words, I check to see

3   if all the parts add up to the whole

4   block-by-block. On Mr. Fairfax's file I find out

5   that there are inconsistencies.

6   I can perform the same thing. Once Mr.

7   Bryan has done this very lengthy process of

8   iterative -- process of IPF, and I can verify for

9   myself that everything adds up however you do it,

10 of course I tell him, I want you to have verified

11 this beforehand so that I can take a cursory look

12 at it and confirm that it works.

13   Q. You don't -- you don't look at Mr. Bryan's

14 various choices along the way of how to resolve

15 inconsistencies in the data? You just rely on him

16 to do that?

17   A. That is correct. By analogy, I just say

18 you adjusted the suit. And I look at it and say,

19 does the suit fit perfectly? And, yes, it fits

20 perfectly. I don't know how you got there but it

21 does fit. And all that matters is that the

22 outcome is giving me a dataset that I can have

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 1   confidence in.

 2        Q. And the perfect fit suit in this case was

 3   49.99 for District 1 and 49.96 for District 2?

 4        A. My recollection is that the data shown in

 5   Table 3 are -- yes.  According to the footnote,

 6   that's what I got using my dataset without the

 7   problems that Fairfax has.

 8        Q. When you say you got, it's what Mr. Bryan

 9   got -- gave you?

10        A. Well, it's what I --

11           MR. HARRIS:  Objection to form.

12           You can answer.

13        A. It's what Mr. Bryan put together for the

14   replication of Fairfax's two districts using the

15   shape files that Fairfax had.  So Fairfax -- just

16   so the picture is clear here, in putting together

17   the blocks, the block level data from my correctly

18   structured file, Mr. Bryan used the -- what are

19   known as shape files, which explain exactly which

20   block goes where in his analysis.

21           So a shape file is something that any GIS

22   person can import into the GIS system and say the
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1   shape file is the master, you know, blueprint for

2   creating the district out of blocks. So when

3   Mr. Fairfax provides that shape file, it's the

4   blueprint for building the district.

5   So Mr. Bryan takes the blueprint and says

6   there is no ambiguity about this blueprint, the

7   blocks that are in the district are these blocks,

8   every other block is outside, I reconstructed the

9   district exactly as he has done with his shape

10   files, and we count up the blocks and we come up

11   with the numbers. And where he gets 49 -- where

12   he gets 50.0-something, I get 49.99. That's what

13   we have.

14   Q. All right. So Mr. Bryan essentially

15   replicated Mr. Fairfax's aggregation of block

16   level data in the two districts, and the numbers

17   are reflected here in Table 3?

18   A. That's correct. And the only distinction

19   that remains is the fact that I know that the IPF

20   data on which my analysis is based is a database

21   one can have confidence in, and the quality of the

22   data have been evaluated and are scientifically

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 1   acceptable.

 2        The data that Mr. Fairfax has used leads

 3   to overall results that look very close to the

 4   ones I got based on a dataset whose quality

 5   remains in question.  Now, it may be that the

 6   numbers add up, but we don't know what's going on

 7   beneath the surface.  And that's why I say there

 8   is some degree of concern about the quality of the

 9   data.

10        Q. I may mispronounce this next term, so bear

11   with me.  I'll spell it for our court reporter

12   when I'm done asking.

13        A. All right.

14        Q. Are you familiar with a method of

15   demography called Bayesian --

16        A. Bayesian.

17        Q. Bayesian -- thank you -- improved surname

18   geocoding?

19        A. I am, yes.

20        Q. Tell me what that is.  We're going to use

21   the term BISG for short.  Is that okay?

22        A. All right.
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1   Q. Is it sometimes used BISG?

2   A. BISG. Right.

3   Q. What is BISG?

4   MR. HARRIS: Are you going to spell that

5   for the court reporter?

6   MR. HEBERT: Yes. B-A-Y-E-S-I-A-N.

7   A. Yeah.

8   Q. Dr. Morrison, can you explain what BISG

9   is?

10   A. Well, I'm the coauthor of a couple of

11   articles, one of which is about BISG. And I'm, as

12   a coauthor, just kind of the demographer of the

13   team. But this is a way of inferring the race and

14   ethnicity of an individual based on that

15   individual's surname in combination with the

16   neighborhood characteristics in which that person

17   lives.

18   And it is -- as best as I can tell, it's

19   pretty much the state-of-the-art methodologically

20   for health insurance plans that need to know the

21   race and ethnicity of people in order to

22   establish -- I'm trying to think of the term they

1   use -- establish the fact that they are not -- to

2   identify racial disparities in healthcare and how

3   they are recognizing and addressing them.

4   Q. Who is the person you coauthored the --

5   A. Mark Elliott, plus a couple of other

6   authors. Mark is a statistician at the RAND

7   Corporation, a very -- a widely published, widely

8   renowned, highly respected statistician who is

9   really the pioneer of this approach.

10   Q. Okay. And just to -- the reason I asked

11   that series of questions is because I didn't see

12   anything in your report where you employed that

13   geocoding method. I just want to make sure that I

14   didn't miss it.

15   A. No. I didn't use it. And it really was

16   not necessary or applicable in this case.

17   Q. Could you have used it if you wanted?

18   A. Well, I -- I would have no reason to use

19   it for the purpose that I was retained for. It's

20   possible that a political scientist might find it

21   useful, but I'm not sure what they did. You'd

22   have to ask them.

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1   If they did want to identify voters who

2   cast ballots and try to identify what their race

3   and ethnicity is, that might be some method they

4   would consider using.

5   Q. Can't you use BISG to identify people by

6   their surname to identify citizens, Hispanics?

7   A. Well, it wouldn't be the preferred method

8   because you already have the Census Bureau telling

9   you who they are. The Census Bureau officially

10   with the -- with the ACS data, that's the gold

11   standard. Now, if you didn't have the ACS and you

12   said, well, what can I do, I don't have the ACS or

13   I'm dealing with people who are members of a

14   healthcare plan, Blue Cross, I don't have ACS data

15   on individuals, I only have data on their

16   neighborhoods, then you might want to consider

17   BISG as a way of getting additional information.

18   Q. I guess all I'm saying is that it is

19   possible to apply BISG to census data and

20   determine, based on Spanish surname, how many

21   Hispanics are living in a particular block group?

22   A. Well, you wouldn't apply it to census

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 1   data.  You would apply it to lists of consumers or

 2   lists of members of the public --

 3        Q. Or voters?

 4        A. -- who you only had their names.

 5        Q. Could it -- I'm sorry.  Go ahead.

 6        A. You have my name, Peter Morrison, but you

 7   know nothing about me from the census.  You'd say,

 8   well, we can make some inferences about whether or

 9   not you're Hispanic and whether or not you're

10   Asian.  Can you tell us what your street address

11   is?  And we'll figure it out from there.

12        Q. So isn't it true that you could use BISG

13   to derive racial or ethnicity estimates within

14   voter registration files, for example?

15           MR. HARRIS:  Objection to foundation and

16   form.

17           You can answer.

18      A. That would be possible.

19        Q. I'm asking theoretically if it's possible.

20        A. Hypothetically, it could be done.

21        Q. And just the final thing on this BISG

22   method.  I take it that you have high regard for
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1   Mark Elliott?

2   A. I do.

3   Q. And do you believe that it's an acceptable

4   method of geocoding?

5   MR. HARRIS: Objection to form.

6   You can answer.

7   A. It's not a method of geocoding.

8   Q. I thought it was an improved surname

9   geocoding?

10   A. It's a method of a -- of estimating the

11 probable race and ethnicity of an individual based

12 on that individual's surname. But it's not -- it

13 is not itself a method of geocoding. It uses

14 geocoded information.

15   Q. And it uses that information -- and I

16 think you used the term state-of-the-art earlier.

17 It uses that approach in trying to assign or

18 determine racial or ethnic identities of people,

19 correct?

20   A. It is an effort to estimate what that --

21 what a particular individual would have answered

22 to the census question what is your race,

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1   ethnicity, and are you Hispanic or not. It's a

2   way of approximating that when that information is

3   missing.

4   Q. Okay. Have you reviewed the reports of

5   the other plaintiffs' experts in this case, Dr. --

6   MR. HARRIS: Do you --

7   (A discussion was held off the record.)

8   (A recess was taken.)

9   Q. You haven't reviewed the reports of other

10 plaintiffs' experts like Dr. Spencer or

11 Dr. Lichtman, have you?

12   A. I have.

13   Q. Oh. You have?

14   A. I've read them.

15   Q. You've read them?

16   A. Yes.

17   Q. Have you verified any of the points that

18 they've made or found that they are faulty in any

19 way?

20   A. I haven't focused on them, you know, with

21 that in mind. I just wanted to be familiar with

22 what they said.

1   Q. Okay. So sitting here today, for example,

2   can you -- can you cite anything in Dr. Spencer's

3   report which I will represent to you deals with

4   analysis of voting patterns and racially polarized

5   voting and candidates of choice? Is there

6   anything in that report that you can, sitting here

7   today, say, no, I disagree with that?

8   MR. HARRIS: Objection to the form of that

9   question.

10   A. I haven't read it carefully enough to be

11   able to do that.

12   Q. Similarly with Dr. Lichtman, who has done

13   an analysis in this case -- you said you've read

14   his report?

15   A. Yes.

16   Q. Is there anything in Dr. Lichtman's report

17   on the totality of circumstances that you can say

18   you disagree with?

19   MR. HARRIS: Objection to foundation and

20   form.

21   A. Just my cursory review of his graphs of

22   his data on socioeconomic variables, I noted that

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1   he repeatedly shows Asians compared to the other

2   minorities and to non-Hispanic whites. And it

3   looked to me, in many cases, like the Asians

4   looked closer to being -- had levels closer to

5   non-Hispanic whites than they did to blacks and

6   Hispanics, but I haven't really done any complete

7   evaluation.

8   Q. All right. Any other points of Dr.

9   Lichtman's report that you can recall, sitting

10   here today, that you noted or observed?

11   A. He seemed to dwell excessively on the fact

12   that I had corrected some data in an earlier

13   report. I'm happy to explain my approaches. I

14   put together data. When I refine it and correct

15   it, I make sure it's corrected before I go to

16   trial and testify on it.

17   Q. Have you, in this case, reviewed any

18   demonstrative or illustrative districts in which

19   there is an effort to just create one as opposed

20   to the two proposed districts in the Fairfax

21   report?

22   A. When I scanned through what Mr. Fairfax

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1   had done -- and I literally just scanned through

2   it -- I noticed there were a whole bunch of

3   different plans that he put together. And I think

4   there was one plan in which he was asserting that

5   I can create a plan with just one district, I can

6   create all sorts of different combinations of

7   districts. I really haven't had a chance to

8   evaluate them.

9   Q. But you haven't drawn any of your own --

10   A. No.

11   Q. -- whether it's one district or two

12   districts?

13   A. I was not asked to draw any districts. I

14   was only asked to evaluate what he had done. And

15   that's confined right now to his first report.

16   Q. All right. Does your report contain a

17   complete statement of the opinions that you'll

18   express in this case?

19   A. That depends on what I'm asked to do next.

20   Q. As of today?

21   A. As of today it does, yes.

22   Q. Are all of the materials that you've

1 considered in the course of forming your opinions

2 that are in your report, are they listed in your

3 report?

4   A. I believe they are, yes.

5   Q. Did you ever have any conversations with

6 Kimball Brace about the dataset or about anything

7 else involving this case?

8   A. I don't recall having any conversation of

9 substance with him, other than being on a

10 telephone call where he may have uttered a few

11 words once, but nothing of substance, no. Nothing

12 that related to anything that I was working on.

13   Q. So the conversation you had with him,

14 though, was about this case?

15   A. It was about --

16   MR. HARRIS: I'd like to clarify, too,

17 you're not inquiring as to conversations where

18 attorneys were involved with the experts? You're

19 referencing a conversation between Dr. Morrison

20 and Kim Brace?

21   MR. HEBERT: Let me back up because I

22 don't know really where I'm going with this yet --

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1   MR. HARRIS: Okay.

2   MR. HEBERT: -- because it is discovery,

3   after all.

4   Q. Let me just say that if, for example,

5   there was a conference call in which you, the

6   lawyers, and the experts that you've retained in

7   this case had brought in a third-party in that

8   conversation, then, yes, I am asking about those

9   conversations because those are not privileged in

10   any way because Mr. Brace is not an expert in this

11   case.

12   MR. HARRIS: I disagree with that. He's

13   been identified as an expert. He's been retained

14   as an expert. And he's been disclosed as such to

15   the plaintiffs. To the extent there is a

16   conversation between the three retained experts in

17   this case, who have all been disclosed to the

18   plaintiffs at this point, and the attorneys, the

19   occurrence of that conference call is certainly

20   not privileged. I would agree with that. But as

21   to what the substance of what those conversations

22   were between counsel and retained experts, I do

1   believe that that would be improper.

2   MR. HEBERT: I'll stand corrected. I

3   didn't recall that Mr. Brace was actually listed

4   as a retained expert in this case in the same

5   degree as others. I didn't even -- I saw his name

6   referenced as somebody with knowledge. I'll take

7   your representation for now.

8   I'm not going to go there anyway, Gerry,

9   so you'll be --

10   MR. HARRIS: Okay.

11   MR. HEBERT: Maybe your heartburn will

12   recede.

13   Q. So have you had any conversations with

14   Mr. Brace outside of conversations where counsel

15   was also involved?

16   A. I don't recall any conversations or any

17   way in which Mr. Brace and I have been in a

18   position to talk together without counsel being on

19   a call. I recall being only on conference calls

20   with the attorneys where I was included and

21   Mr. Brace was on the line, as well.

22   Q. Okay.

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1   A. And I don't recall any substantive

2   exchange between Mr. Brace and myself on those

3   calls.

4   Q. Okay. Thank you for that clarification.

5   I asked you earlier about your CV and

6   whether or not it was updated. And you told me

7   about a particular date that was listed there, I

8   believe July of this year. But I noticed in the

9   list of Appendix A there was not a listing of a

10 case that I thought you might be involved in

11 called the East Ramapo case.

12   A. Yeah. That was a case that --

13   Q. Is that still going on?

14   A. That's not on that list?

15   Q. No. As of August 7th, 2019 you say this

16 is updated, but I don't see that listed here.

17 Feel free to look it over and make sure --

18   A. No. I'll take your word for it.

19   I know East Ramapo is -- it's either a

20 case that was -- I'm sorry. This refers to every

21 case since --

22   Q. 2012.

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1   A. Okay. East Ramapo -- I was involved in

2   something in East Ramapo. And I'm pretty sure it

3   was after 2012. And I -- this may be an

4   inadvertent omission. I wasn't -- I was, and I

5   may still be, involved in a dormant case in East

6   Ramapo that -- if I have worked on it, it hasn't

7   been within the last nine to 12 months. Sometimes

8   these things just -- they never return. I never

9   hear back from them.

10   But that may be an honest omission. And

11   if it is, I'm happy to include it. I know that --

12   I know that I have a record of it somewhere in an

13   earlier version of cases I have been involved in,

14   but it apparently is not on this list.

15   Q. And to the best of your recollection

16   sitting here today, do you remember what that case

17   is about?

18   A. It was a voting rights challenge, as I

19   recall.

20   Q. And you testified for the defendants or --

21   A. I'd have to check my records on that. I'm

22   quite sure I would be working on behalf of the

1   defendants. And I don't know if I testified. It

2   may well be that I haven't testified in that case.

3   This is another possibility. This is a case where

4   I've been working on getting ready to testify but

5   have not yet testified.

6   Q. Do you know if you gave a deposition in

7   that case?

8   A. When I say testify, I mean any kind,

9   deposition or trial. It may be I have not

10   testified at all. And that may be why it's not on

11   the list.

12   Q. Sitting here today, you can't remember

13   whether you testified by deposition or at trial?

14   A. I am trying to think that this may well be

15   one where I did a lot of work but no one asked for

16   my deposition yet and I had not yet prepared a

17   report. In other words, if I had prepared a

18   report, I would consider that to be something that

19   I had testified in. So I'll have to check my

20   record on that. I apologize if it's an

21   inadvertent omission.

22   Q. Could you let your counsel know what the

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1   answer is, and I know he will let me know

2   promptly?

3   A. I will let him know. And I will look it

4   up promptly.

5   Q. Thank you.

6   You mentioned earlier Mr. Bryan, that you

7   had reached out to him and he had done the IPF

8   analysis. Is there anybody else that you've

9   reached out to in that type capacity where you've

10   asked them to run a particular part of your

11   analysis so that you can include it in your

12   report?

13   A. Not in this case, no.

14   Q. Okay. Did you pay Mr. Bryan for his work

15   or does he volunteer?

16   A. He is -- he is paid in this case by the

17   client that has retained me through Peter A.

18   Morrison & Associates, Incorporated. He is the

19   coauthor of our book. And I worked with him and

20   coauthored many things with him. And he is -- he

21   is paid, yes. And he's paid at the same hourly

22   rate that I am.

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1   Q. And you pay him through your work for the

2   city? Is that, basically, it?

3   A. Correct. He is billed out, you know, as

4   part of the Associates.

5   Q. Okay. Peter A. Morrison Company --

6   A. & Associates.

7   Q. & Associates. How many associates do you

8   have?

9   A. I would say at this point Mr. Bryan is my

10   principal associate -- my regular associate.

11   There are people to whom I have turned for advice

12   on occasion and said this is more than a favor,

13   I'd like to compensate you for spending a few

14   hours giving me what I would describe, you know,

15   informally as critical peer review to see if you

16   think there is anything that wouldn't stand up to

17   academic peer review. I just want to be sure I

18   got it right. And I will on occasion tell them to

19   spend an hour or two on it and tell me what's

20   wrong with it. Thomas Bryan is the only

21   associate.

22   Q. Peter A. Morrison, you're a corporation?

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1   I mean, I know you are a person.

2   A. It's incorporated as -- right.

3   Q. You've incorporated?

4   A. That's correct.

5   Q. Okay. How many employees are there of

6   Peter A. Morrison Corporation?

7   A. You're looking at the full roster right

8   across the table.

9   Q. Okay. So Peter A. Morrison & Associates

10   is the name, but you've associated by using

11   colleagues to assist you in your work?

12   A. I call upon my colleagues, whom I know

13   professionally, for critical advice and for

14   technical assistance as needed.

15   Q. Okay. Earlier you were kind enough to

16   give me a guesstimate of how much time you spent

17   preparing your report, which you estimated at 10

18   days and eight-hour days, which would be about 80

19   hours. Are you still sticking with that

20   guesstimate?

21   A. I'm sticking with that as the guesstimate.

22   And I'm saying it's a very, very rough

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 1    guesstimate.  I'd have to check my billing

 2    records.

 3         Q. Does that 80 hours include Mr. Bryan's

 4    work or is his work over and above the 80 hours?

 5         A. That would be a total for all the work

 6    that was done, his time doing the IPF, which was

 7    fairly time-consuming, plus my time.

 8         Q. Have you communicated with any members of

 9    the City Council or the Mayor in this case?

10         A. No.  I've only -- the only people I've

11    communicated with are people in the City

12    Attorney's Office.

13         Q. Okay.  Any corrections or errors in the

14    report that I should be aware of today?

15         A. No.

16         Q. Okay.  And I believe you said earlier that

17    you had exchanged -- you had phone calls and

18    emails with Mr. Bryan, correct?

19         A. Correct.

20         MR. HEBERT:  Okay.  For the record, Gerry,

21    we're requesting copies of all those emails.

22         Q. Do you have records of telephone
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1   conversations, also, Mr. Morrison?

2   A. I don't keep records of telephone

3   conversations, but I very likely have emails still

4   on my, you know -- I don't generally erase every

5   email.

6   Q. Okay. So we would ask you to search your

7   emails with Mr. Bryan and produce those to the

8   City Attorney --

9   A. All right.

10   Q. -- for us.

11   I don't -- in terms of telephone

12   conversations, I wasn't looking, like, for a

13   summary of the conversation, you know, he called

14   at such and such a time and we talked about the

15   following quotes. I'm just wondering, did you

16   take notes of any of the phone conversations?

17   A. No. I really don't. Usually the way it

18   works is I get a text from Mr. Bryan. He says --

19   or I get an email. He says, to discuss. And,

20   then, there is an attachment, so I look at it.

21   Q. Sorry.

22   A. I look at it. And, then, he and I have a

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1   conversation. He says, open up this file. And I

2   did so and so. That's the data you wanted.

3   Q. Okay. And you just mentioned the word

4   text. I neglected to ask you that. When you say

5   you had phone conversations with him, were they by

6   phone or were they by text?

7   A. Phone.

8   Q. Have you ever texted with him?

9   A. The only text we use -- the only text

10   relationships I have with Tom are, sorry I

11   couldn't answer your call, call me some other time

12   when I'll be available. But there is -- the texts

13   are not substantive. They're simply arranging

14   times we can communicate either by phone or --

15   typically, he won't even text me. He'll email me.

16   He'll say, check your email. That's what you

17   asked for. It's attached. And it will be a

18   spreadsheet.

19   Q. All right. So we would ask you to look

20   through your text messages --

21   A. All right.

22   Q. -- just to ensure that there isn't

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1   anything of substance, as you've put it.

2   A. All right.

3   Q. And I would describe something of

4   substance as being anything beyond I can't talk

5   right now or I'll call you back or something like

6   that.

7   A. All right. I will check that --

8   Q. Thank you.

9   A. -- with the stipulation that my iPhone

10   automatically deletes texts after 30 days. But I

11   can say for the record that I don't recall ever

12   having had any conversation of substance with Mr.

13   Bryan on this case by text message because I just

14   can't (indicating) -- I can't (indicating) -- I

15   can't type it in that fast.

16   MR. HARRIS: If I can ask for a point of

17   clarification. You're referencing as a

18   conversation or text message or email with Mr.

19   Bryan as it relates specifically to the work he's

20   performing for Dr. Morrison as it relates to

21   Dr. Morrison's disclosure in this case or his

22   report?

1   It seems to me like what he's done for the

2   City of Virginia Beach may inform the opinions in

3   the report. But to the extent that he's discussed

4   in his testimony today that they have some ongoing

5   associate relationship, I don't particularly want

6   to go through, like, every conversation he's ever

7   had and every email he's ever had with Mr. Bryan

8   to try and decide what is and what is not.

9   MR. HEBERT: The only -- thank you for

10   that. The clarification is and the limitation is

11   that the only emails between you to Mr. Bryan or

12   from Mr. Bryan to you we are interested in involve

13   any issue in this case --

14   A. Correct.

15   Q. -- and any analysis in this case.

16   A. Right.

17   Q. And we do not want you to provide to the

18   City Attorney --

19   A. Okay. I got you.

20   Q. -- all the other emails you have with Mr.

21   Bryan on all your other cases.

22   A. That will save a lot of paper.

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1   Q. And, then, the final question I have is,

2   over the years, when was the last time you taught

3   a graduate or undergraduate course? You taught at

4   the University of Pennsylvania, correct?

5   A. Yeah. I would say the -- the answer to

6   that is I have not formally taught courses in an

7   academic setting for a long time, decades.

8   Q. Okay.

9   A. But I regularly present papers at academic

10   meetings. And, in fact, I'm scheduled to make a

11   presentation in about a month at the University of

12   Washington to a graduate seminar in which students

13   will be attending. And I -- they view it as a

14   form of visiting, you know, professor type thing,

15   an academic forum where I can present my -- the

16   work that I do in the field that I work in as an

17   opportunity for graduate students to see the kinds

18   of work that applied demographers do and the kinds

19   of careers that they might envision once they get

20   their Ph.D.s.

21   Q. What is applied demography?

22   A. It's a subset of all the work that

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1   demographers do. And the simplest way to

2   understand it is that academic demographers are

3   pushing forward the frontiers of our knowledge.

4   And applied demographers are focused more on

5   utilizing the knowledge rather than pushing

6   forward the frontiers.

7   And what I do is very much in the applied

8   demography arena. And on occasion I find that I'm

9   pushing forward the frontiers, and then I publish

10   what I've learned. So I have a record of doing

11   both.

12   Q. The presentation that's coming up in

13   Washington, is that a one-day thing?

14   A. Yeah.

15   Q. Okay. And I didn't really mean to talk

16   about courses that you taught. I really was just

17   trying to put a date on something. So let me go

18   back.

19   A. Yeah.

20   Q. Since you left the University of

21   Pennsylvania and taught there to the present time,

22   roughly how many cases have you served as an

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 1    expert witness in, would you estimate or

 2    guesstimate?

 3         A.  Probably in the range of 50.

 4         Q.  Okay.  That's all I have for today,

 5    Dr. Morrison.  Thank you so much for your time.

 6         A.  Thank you.

 7             MR. HEBERT:  Thank you, Gerry, for your

 8    help in getting this set up.

 9             THE DEPONENT:  Thank you for finishing in

10    time.

11             MR. HARRIS:  Dr. Morrison, we've advised

12    our clients, and we will advise you, to take the

13    opportunity to read and sign the deposition for

14    accuracy, particularly with the use of certain

15    specific terms today.  So that's, obviously, your

16    choice, but that would be our recommendation.

17             THE DEPONENT:  Okay.

18             MR. HARRIS:  Will you read and sign?

19             THE DEPONENT:  I will read and sign.  And

20    you're taking care of seeing I get a copy or

21    you'll see I get a copy?  And you've made

22    arrangements for -- I think we discussed this
```

1   earlier about who's responsible for seeing that I

2   am eventually paid for the expenses and all my

3   time.   That's between --

4   MR. HEBERT: We can talk about that.

5

6   (Signature having not been waived, the

7   deposition of PETER A. MORRISON, Ph.D. was

8   concluded at 12:55 p.m.)

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1   ACKNOWLEDGMENT OF DEPONENT

2   I, PETER A. MORRISON, Ph.D., do hereby

3   acknowledge that I have read and examined the

4   foregoing testimony, and the same is a true,

5   correct, and complete transcription of the

6   testimony given by me and any corrections appear

7   on the attached Errata Sheet signed by me.

8

9

10   _____   _____

11   (DATE)   (SIGNATURE)

12

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 1   CERTIFICATE OF SHORTHAND REPORTER-NOTARY PUBLIC

 2            I, Penny C. Wile, RPR, RMR, CRR, the

 3   officer before whom the foregoing deposition was

 4   taken, do hereby certify that the foregoing

 5   transcript is a true and correct record of the

 6   testimony given; that said testimony was taken by

 7   me stenographically and thereafter reduced to

 8   typewriting under my direction; that reading and

 9   signing was requested; and that I am neither

10   counsel for, related to, nor employed by any of

11   the parties to this case and have no interest,

12   financial or otherwise, in its outcome.

13            IN WITNESS WHEREOF, I have hereunto set my

14   hand and affixed my notarial seal this 2nd day of

15   October, 2019.

16            My commission expires:  January 31, 2021.

17

18

19

20   _____

21    NOTARY PUBLIC IN AND FOR

22   THE COMMONWEALTH OF VIRGINIA
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PENNY C. WILE
Notary Public
Commonwealth of Virginia
Registration No. 212528
My Commission Expires Jan 31, 2021

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